A novel care model: Maternity care experiences of pregnant individuals who use substances

by

Kristen Ann Gulbransen

A Thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

In partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

College of Nursing, Rady Faculty of Health Sciences

University of Manitoba

Copyright © 2023 by Kristen A Gulbransen

Abstract

Background: The overall incidence of substance use for individuals during childbearing years is rising. Pregnant individuals who use substances commonly have complex circumstances and face barriers such as systemic racism and judgment when health care services are accessed. Interprofessional care models and provider approaches driven by patient perspectives is a necessity in effort to provide best practice.

Purpose: The purpose of this thesis was to critically examine interprofessional maternity care models among pregnant individuals and women who use substances. A sequential research study was undertaken. *Phase 1* involved a scoping review of the literature. This led to *Phase 2* an exploratory, qualitative design informed by the five processes of appreciative inquiry. Patient participants who received perinatal care from an interprofessional care team (midwife, obstetrician, and psychiatrist) participated in one-on-one semi-structured interviews. Data analysis was guided by thematic analysis along with on-going consultation provided by Knowledge Carrier and Grandmother Shingoose.

Methods: The scoping review was conducted to systematically search for articles from seven health-related databases. Eleven articles met full inclusion criteria and were summarized. Optimal care models for pregnant individuals who use substances exist and reported improved maternal and neonatal outcomes. Interprofessional care teams all included a maternity provider along with other various care providers and aimed to provide continuity of care from prenatal through postpartum. A few care provider characteristics that were identified on the interprofessional care teams included: nonjudgmental, trustworthy, respectful, and relational.

The qualitative research took place in a clinic setting that offered interprofessional care for pregnant individuals who use substances. There were 14 participants who participated in

semi-structured interviews and shared their insights and experiences regarding an interprofessional maternity care model and team. Participants provided detailed descriptions of actionable ways for care providers to provide safe, compassionate, dignified, and connected care. The care approaches were detailed and nuanced on how to provide care that does not judge, provides reassurance, fosters a peaceful relationship, incorporates harm reduction, is kind, demonstrates listening, shows acceptance, honors natural supports, and is trusting. Areas to improve the interprofessional maternity care approach were also explored. Participants suggested that increased integration of cultural programming, further partnering with other specialists, and individualized pain approaches during birth and postpartum could be improved.

Acknowledgements

I would like to acknowledge and thank the many people who have supported me throughout my doctoral studies. While the degree has my name on it, it happened through the encouragement, support, and kindness of many that surrounded me.

To my advisor, Dr. Kellie Thiessen, you offered timely support, guidance, and expertise throughout my doctoral program. Whether virtual or in person, I appreciated your leadership during our discussions, focus on research that would be actionable and passion to make a difference to the perinatal population. Meetings I have had with Dr. Thiessen are meaningful and impact my way of thinking, encourage me to analyze status quo, deconstruct and construct ideas. I always left our discussions feeling inspired and encouraged, I am very thankful you agreed to be my advisor.

Thank you to my committee members, Dr. Patricia Gregory, Dr. Javier Mignone, Dr. Wanda Phillips-Beck, and Dr. Heather Watson. Dr. Patricia Gregory for your commitment to research, sharing your expertise in perinatal nursing, and positive feedback. Dr Javier Mignone for providing expert guidance on the PhD process and offering thoughtful questions throughout my studies and writing. Dr Wanda Phillips-Beck for supporting me in so many good ways, providing resource recommendations, and introducing me to Grandmother Shingoose. Grandmother Shingoose for your wisdom, hopeful, and caring approach with all the research participants. You offered the participants and me teachings that will impact us forever. Dr. Heather Watson for your clinical expertise, and commitment to make a difference in the clinic based on finding s from this research project. Thank you, Dr. Watson, and Dr Thiessen, for having me share your clinic space during the research study. And thank you, Dr. Bernie Pauly for serving as my external examiner and providing insightful feedback.

Thank you to Dr Donna Martin, Associate Dean of Graduate Studies School of Nursing for initially coming to meet a group of Red Deer academic nurses interested in pursuing graduate studies. You have been a great resource and encourager to our entire PhD cohort since we started graduate studies. Thank you to my PhD peers in this cohort, you have been wonderful supporters and I learned from each of you during our courses.

I would like to acknowledge the generous funding and support I have received for my doctoral studies through the acceptance of the following awards: Manitoba Research Center for Nursing Research, Dr Wanda Phillips Beck Chair Award, Alberta Association for Registered Nurse Education Trust Fund, Margaruite Schumacher Award, and Red Deer Polytech Extended Funding Awards. Thank you to Diane Cepanec and April Lussier who me helped with many research grant applications.

Thank you to my friends and family for your ongoing encouragement and support. My parents, Emil and Frances who are always interested in my work and proudest of every milestone accomplishment. My sister, Dana, Auntie Barbara, Dr Brenda Query, Carmen Burrows, Lisa Mackey, and Jill Halter, for checking in regularly, being interested in my PhD life, and cheering me on to the finish line.

And, to my husband Davin thank you for your support over the past four years to complete the requirements of a PhD. Many thanks for being such a good Dad to our kids, especially on evenings and weekends when I was in the office for hours of writing, research, and then travelling to Winnipeg to do data collection. Olivia and Luke, thank you for your patience everyday as I worked through my studies. Especially when we were all navigating online school and on during my course work when I was finishing papers to meet a deadline. I have said many times that my PhD would not have been possible if I did not have such understanding and overall

great kids. Olivia the calmness you bring to our family helped during high stress times and Luke your humour was what I needed every day. Being surround by so many people with big hearts and a desire to make this world a better place motivated me each and every day.

Dedication

To all the individuals who participated in this study.

You were brave, shared meaningful stories, and improved the future for perinatal care patients.

Table of Contents

Abstract ii

Acknowledgements iv

Dedication vii

Table of Contents viii

List of Tables xiv

List of Figures xv

Chapter 1: Introduction 1

Introduction 1

- Background 2
- Review of the Literature 2
  - Maternal and Neonatal Trends and Outcomes 3
  - Disparities among Pregnant Individuals who use Substances 4
- Key Research Concepts 5
  - Substance Use 5
  - Patient and Provider relationship 6
  - Decision to Engage with the Health Care System 6
  - Power in Health Vare Relationships 7
  - Interprofessional Care Team 8
- Researcher Locating Self 8
- Thesis Considerations 11
- Epistemological Foundations 11
  - Constructionism 12

Objective & Structure of the Thesis 14

Chapter 2: Scoping Review of Interprofessional Care Team and Models 14

Chapter 3: Appreciative Inquiry as Research Method 15

Chapter 4: A Qualitative Exploratory Study on Interprofessional Maternity Care Models 15

Chapter 5: Conclusion 16

Significance of the Paper Based Thesis 16

References 18

Chapter 2: Scoping Review of Interprofessional Care Team and Models 31

Preamble 31

Author Contributions 32

Abstract 33

Introduction 35

Background 36

Methods 38

Study Selection Criteria 39

Data Sources and Searches 40

Data Collection Procedures 40

Findings 42

Article Overview 43

Summation of Interprofessional Care Models 47

Patient Enrollment and Continuity of Care within Programs 47

Co-location of Services 49

Care Model Approaches 50

Roles and Characteristics of the Interprofessional Care Team 52

Interprofessional Care Team Roles 52

Interprofessional Care Provider Characteristics 53

Patient and Program Outcomes 54

Improved Maternal and Neonatal Outcomes 54

Discussion 55

Gaps in the Literature 58

Conclusion 59

References 61

Chapter 3: Appreciative Inquiry as Research Method 71

Preamble 71

Author Contributions 71

Abstract 73

Introduction 75

Overview of Appreciative Inquiry 76

Appreciative Inquiry as a Research Method 78

Use of the Five Stages of Appreciative Inquiry 81

Choosing the Positive as Inquiry 82

Inquiry into Exceptionally Positive Moments during Data Collection 84

Share the Stories and Identify Life Giving Forces during Data Collection 85

Create Shared Images of a Preferred Future 85

Innovate to Create that Future during Data Analysis and Dissemination 88

Discussion 90

Conclusion 92

References 94

Chapter 4: A Qualitative Exploratory Study on Interprofessional Maternity Care 101

Preamble 101

Author Contributions 101

Abstract 103

Introduction 105

Study Significance & Purpose 108

Methods 109

Design 109

Setting 111

Sample 111

Study Procedure 112

Data Analysis, Interpretation & Rigor 113

Results 114

Participant Characteristics 114

Patients' Perceptions of Care Providers 114

Safe Care 115

Theme: Not Judging 115

Theme: Reassuring and Peaceful Relationships 116

Theme: Harm Reduction 117

Compassionate Care 118

Theme: Kindness 118

Theme: Listener 119

Dignified Care 120

Theme: Acceptance and Deserving 120

Theme: Shared Decision Making 121

Theme: Honoring Natural Supports 121

Connection 122

Theme: Continuity of Care 122

Theme: Trust 123

Opportunities to Improve Care from Pregnancy through Postpartum 124

Cultural Care 124

Coordination of Postpartum Services 125

Increased Support in the Birth and Postpartum Setting 125

Discussion 126

Limitations 129

Implications for Research and Practice 129

Conclusion 131

References 132

Chapter 5: Conclusion **143**

Overview of Key Findings 143

Chapter 2: Scoping Review 143

Chapter 3: Appreciative Inquiry as Research Method 145

Chapter 4: Qualitative Exploratory Research 146

Discussion 147

Interprofessional Perinatal Care Team 149

Considerations for Best Practice Implementation 151

Safe Care 152

Harm Reduction Programming and Policy 152

Culturally Grounded Care and Approaches 154

Education and Training 155

Knowledge Translation and Dissemination of Findings 158

Sustaining and Planning for an Interprofessional Perinatal Care Team 159

Strengths and Limitations 160

Conclusion 162

References 163

Appendix A – Sample search strategy. 171

Appendix B – PRISMA-ScR checklist. 176

Appendix C – Data extraction form from Covidence. 179

Appendix D – Health Research Ethics Board, University of Manitoba approval letter. 184

Appendix E – Shared Health ethics approval letter. 186

Appendix F – First Nations Health Research Social Secretariat of Manitoba letter. 189

Appendix G – Informed Consent for Study Participants. 190

Appendix H - Semi Structured Interview Guide. 196

Appendix I – Women's Ambulatory Care Clinic Screening Tool 201

Appendix J – Invitation to Participate in the Study 202

Appendix K – Consent to Contact 203

Appendix L – Letter of Support from Ambulatory Care Clinic Providers 204

Appendix M – Briefing Note for Graphic Recorder 205

Appendix N – Graphic Recording 208

List of Tables

Chapter 2. Table 1: Interprofessional Care Delivery Programs for Pregnant Individuals Who Use Substances: Program and Patient Outcomes 44

Chapter 2. Table 2: Care Model Characteristics 51

Chapter 2. Table 3: Reported Care Provider Characteristics 54

Chapter 3. Table 1: Trauma Informed Principles and Researcher Action 80

Chapter 3. Table 2: Identified Barriers turned into Appreciative Inquiry Questions 84

Chapter 5. Table 1: Practical Safe, Dignified, Compassionate and Connected Care Approaches 147

Chapter 5. Table 2: Examples of Canadian Care Education Resources Related to Substance Use, Trauma Informed Care, and Harm Reduction 156

List of Figures

Chapter 2. Figure 1: Preferred reporting items for systematic reviews and meta-analyses (PRISMA-ScR) – Scoping Review Extension flow diagram 42

Chapter 3. Figure 1: Outpatient Clinic Pathway 79

Chapter 3. Figure 2: Graphic Recording 88

Chapter 4. Figure 1: Thematic Analysis 142

Chapter 1: Introduction

Globally, there is a substance use epidemic with a disproportionate impact on maternal morbidity and mortality (Guttmann et al., 2019; Haycraft, 2018; Perez et al., 2022; World Health Organization [WHO], 2014). Substance use leading to overdose, particularly deaths involving fentanyl during pregnancy, have reached record highs (Bruzelius & Martins, 2022). Substance use is often a barrier to engagement in maternity care (Ecker et al., 2019; Holt & French, 2019). Health care interactions for pregnant individuals who use substances are influenced by social, economic, and political factors and can be complex for all involved. Experts have recommended that care approaches and policies for substance involved individuals need to include factors beyond the biomedical, and include integrated wraparound care approaches, as well as actionable ways to address discrimination, prevent shame, and honour individuals (Goodman et al., 2017; Government of Canada, 2018; Kitching et al., 2020). The maternity care community has requested policy development and research that is supportive of patients who are substance involved (Graves et al., 2020; Rutman et al., 2020).

The interprofessional team approach has contributed to improved maternal and neonatal outcomes (Hubberstey et al., 2022; Jones et al., 2021; O'Connor & McLaurin, 2016; Rutman et al., 2020). Few researchers have studied the distinct roles and care approaches of an interprofessional maternity care team and garnered the patient perspectives of these care interactions. Research about pregnant individuals who use substances has primarily been broad in nature, focusing on disparities and barriers to care (Holt & French, 2019; Mahoney et al., 2019; McLafferty et al., 2016), the increased risk of premature birth, and neonatal abstinence syndrome (Kalaitzapoulos et al., 2018; Perez et al., 2022). Existing best practice guidelines

suggest that an interprofessional care approach is a necessity (Ecker et al., 2019; Gulbransen et al., 2021).

In this introductory chapter, I provide a review of the literature, share my journey as a researcher, educator, and provider by locating myself, discuss my commitment to this topic of research, outline the research considerations, and epistemological foundations related to the thesis dissertation. I then describe the objectives and overall structure of the thesis.

Background

Substance use during pregnancy is one of the most missed and undertreated diagnoses in pregnant women (Ecker et al., 2019; Krans et al., 2019). Pregnant individuals who use substances commonly have complex circumstances and face several barriers when accessing services (Renbarger et al., 2020; Rutman & Hubberstey, 2019). In Canada, many care providers (Graves et al., 2020), community programmers, funding agencies, and policy developers are asking questions and conducting research to develop and renew care services to best support pregnant individuals who use substances (Rutman et al., 2020). Current care for pregnant individuals who use substances is often framed with risk labelling (Stengel, 2014). This has not had a positive impact on their care outcomes or reduced barriers to health care access (Kalaitzopoulos et al., 2018). The need for best practice guidelines and a care approach that is driven by patient priorities is needed (Graves et al., 2020; Gulbransen et al., 2021), but little actionable direction is available.

Review of the Literature

Trends suggest that the overall incidence of substance use for individuals during their childbearing years is rising (Government of Canada, 2023; Guttmann et al., 2019; Nickel et al., 2022). Substance use among women who are pregnant is a major global concern (Perez et al.,

2022; WHO, 2014). Prevalence of substance use in Canada ranges from 1-5.4% (Klaman et al., 2017) and is likely under-reported (Ecker et al., 2019; Seybold et al., 2014). Individuals who use alcohol or substances during pregnancy are often living in high-risk environments characterized by poverty, unstable housing, food insecurity, unemployment, and often have histories of abuse and psychological issues (Shahram et al., 2017). While substance use can affect all, irrespective of socio-economic status, a history of trauma, toxic stress (Bushnik et al., 2017), relationship discord, social deprivation, and marginalization (Ordean et al., 2017) are over-represented. Indigenous women in Canada have been hyper-visible in research, policy, and interventions related to substance use during pregnancy (Shahram et al., 2017).

The Society of Obstetricians and Gynecologists Canada's (SOGC) request for more research on substance use during pregnancy (Graves et al., 2020) coincides with what front line maternal child health care providers are demanding for in the clinical workplace. Results from a scoping review revealed that broad clinical recommendations to use a multidisciplinary team to universally screen, assess, and manage pain during labor exist but there is a need for actionable and nuanced guidelines specific to this population (Gulbransen et al., 2021). The majority of best practice guidelines are delineated from the provider perspective and lack a solution focused approach to incorporate a culturally safe, trauma informed, dignified, and compassionate care approach. This necessitates more research that can potentially influence the system and adapt care models to meet the needs of pregnant individuals who use substances. The patient perspective is notably absent from the literature.

Maternal and Neonatal Trends and Outcomes

Maternal and neonatal outcomes correlated with substance use during pregnancy can have long-term impacts on the person, their family, and community. Maternal outcomes related

to substance use may include cardiomyopathy (Pierce et al., 2019), transmission of viral infections (Binka et al., 2018), psychotic episodes, overdose, and death from cardiorespiratory complications (Government of Canada, 2018). Longer term societal consequences can include reduced productivity, interpersonal violence, stress, and future unintended pregnancies (Campbell & Bunting,19911; Seng & Taylor, 2015;). Kalaitzopoulos and colleagues' (2018) systemic review and meta-analysis reviewing the intrauterine exposure of the substance methamphetamine has been linked to decreased birth weight, head circumference, and body length. There are greater neonatal intensive care unit (NICU) admissions due to prematurity and neonatal abstinence syndrome with intrauterine substance exposure (Perez et al., 2022). Admission to the NICU is accompanied by a plethora of complications, including potential separation of the mother-infant dyad (Achilles & Castaneda-Lovato, 2019; Blount et al., 2019; Dumas et al., 2013). Substance use is a financial burden in healthcare and impacts the health, education, and social systems, particularly through substance related overdoses (McLellan, 2017).

Disparities among Pregnant Women who use Substances in Canada

The widespread concerns with all types of substance use are compounded by stigma, systemic marginalization, structural racism, and fear of child apprehension for the childbearing and childrearing parents (Association of Women's Health, Obstetric and Neonatal Nurses, 2019; Ecker et al, 2019; Motavalli et al., 2020; Ordean et al., 2017; Shirley-Beaven et al., 2020). Visible and invisible barriers and provider biases towards pregnant women who use substances exist (Denison et al., 2014; Frazer et al., 2019; Holt & French, 2019; Mahoney et al., 2019; Motavalli et al., 2020; Renbarger et al., 2020; Shirley-Beaven et al., 2020). A meta-analysis of the qualitative research highlighted stigma and fear as the most prevalent barriers for pregnant

women who use substances when engaging in prenatal and postpartum care (Renbarger et al., 2020). It is evident that there can be a challenging discourse to obtaining nonjudgmental care among pregnant individuals who use substances. Pregnant individuals have offered that they are often framed with the double stigma of being a drug user or "addict" along with a drug user who is pregnant or a mother (Holt & French, 2019). Additionally, patients report that, once they have disclosed substance use during pregnancy, it has followed them on their medical records throughout the pregnancy and beyond. Stigma associated with substance use or "addiction stigma" is thought to exacerbate the structural and individual level barriers to treatment and care (Hatzenbuehler et al., 2015; Stengel, 2014). When pregnant individuals who use substances interact with the health care system, they are often faced with judgment evoking shame and fear, which can impact the health care decisions they make regarding future interactions, including appointment cancellations and avoidance (WHO, 2014). It is well worth exploring how negative, judgmental interactions between the provider and patient can be changed. The aim of this research was to identify the strengths of interprofessional maternity care teams and opportunities to improve care within the health care system.

Key Research Concepts

The main concepts explored in the research study will be further described to provide context within the thesis research and describe how they are understood by the researchers.

Substance Use

For this research study, substance is defined as any psychoactive compound with the potential to cause health and social problems, including addiction (McLellan, 2017). We are aware that many patients who use multiple substances (Bruzelius & Martins, 2022; Nickel et al., 2022) and others who use unregulated substances unintentionally ingest compounds such as

carfentanil and methamphetamine (Biggar et al., 2021). Substances of concern where this qualitative research study took place include opioids (Government of Canada, 2023), methamphetamine (Nickel et al., 2022), and cannabis (Balneaves et al., 2023).

Patient and Provider Relationship

The patient and provider relationship can be complex and is unique to each person. It is recognized that each interaction between the patient and provider is influenced by several factors. Engaging in healthcare can be a challenging process that requires considerable effort on the part of users and involves much more than simply presenting at a health care facility (Dixon-Woods et al., 2006; Jones et al., 2014). The delivery of healthcare services at the point of care, and the interactions between healthcare providers and patients, are a fundamental component of healthcare engagement (Horrill et al., 2018; Tang et al., 2015). Quality of care requires both the provision of the care (i.e., evidence based practices such as lab work, ultrasound) and the experience of care (i.e., effective communication, respect, emotional support) (Tunclap et al., 2015). Respect, dignity, and compassionate care approaches have long been identified as key ingredients when caring for childbearing and child rearing families (Tunclap et al. 2015; WHO, 2014). These approaches were further explored in this research study.

Decision to Engage with the Health Care System

Despite the deterrent of fear of child apprehension, many patients who use substances still seek prenatal care (Denison et al., 2014; Shahram et al., 2017). Denison and colleagues (2014) reported that, in their study with fifteen participants, the threat of child apprehension did not deter most of the women participants from accessing health care services for their children, but racism, prejudice, and discrimination impacted their decision to seek health care services for themselves (Browne et al., 2016; Denison et al., 2014; Goodman et al., 2017; Kitching et al.,

2020; Nelson & Wilson, 2018; Tang & Browne, 2008; Tang et al., 2015; Wylie & McConkey, 2019). Understanding that health care interactions are based on a socio-relational dynamic not just between the provider and patient, but within a larger context, acknowledges that there are many influencing contributors that make health care interactions possible (Horrill et al., 2018).

Indigenous patients' experiences of disrespectful treatment by healthcare providers remains a significant barrier to engaging and accessing health care (Allan & Smylie, 2015). Health concerns of patients who are Indigenous are frequently trivialized, diminished, or dismissed (Browne et al., 2016; Goodman et al., 2017; Tang et al., 2015). These experiences begin a 'negative feedback loop' in which patients who are Indigenous experience poor quality care, expect to receive similar negative experiences in their next encounter and subsequently delay presentation. These patients are subsequently admonished by healthcare providers for their delay, which further reduces their contact with healthcare providers (Browne et al., 2016; Goodman et al., 2017; Nelson & Wilson, 2018). Some patients who are Indigenous report the need to transform themselves to look and act a certain way to gain 'credibility' for their health concerns to be heard and understood (Browne et al., 2011; Tang & Browne, 2008). It is evident that there are many complexities for patients engaging in care with the health care system and their providers that requires an improved system approach.

Power in Health Care Relationships

Scholars have long recognized that all healthcare relationships are power-laden and unequal (Papps & Ramsden, 1996). This also occurs during the research process, despite attempts to mitigate this power differential (Reed, 2007). It is important to note that power is not a static or fixed entity that is held by one person or profession, but rather is negotiated in every encounter and mediated by social signifiers such as race, gender, culture, age, and class

(Anderson et al., 2009; Foucault, 1978; Gergen, 2023). The notion that power is co-created and this principle informed the research process. We aimed to amplify patient voices and focused on participant perceptions and definitions of interprofessional maternity care team.

Interprofessional Care Team

Providing an interprofessional care team approach for patients in many health care scenarios has been recognized as best practice (Li et al., 2018; Schulz & Wirtz, 2023; WHO, 2010). An interprofessional care team is defined as a group of individuals from different professions that share knowledge with each other to enable effective collaboration and improve health outcomes (Scaria, 2016). Effective interprofessional health care teams are known to be committed to a common purpose that leads to improved access to health interventions, coordination, and efficient use of resources (WHO, 2010). The use of interprofessional teams for the provision of health care often emerges when there is a need to collaborate on complex medical issues, provide care to the underserved, or improve a specific health outcome (Li et al., 2018). Highly integrated interprofessional collaboration versus parallel practices with two separate patient caseloads has resulted in improved outcomes and health care cost savings (King et al., 2012). The interprofessional care team roles and characteristics of those who care for pregnant individuals who use substances are further explored in this thesis dissertation.

Researcher Locating Self

Within qualitative research, locating oneself as a researcher is important for the reader to gain insight into who is conducting the research (Reed, 2007; Thorne, 2016). My nursing experiences over the past twenty years have primarily been involved in birth and postpartum clinical practice. This is the area I wanted to practice in before I even started nursing school. I

have had the opportunity to work in the capacity of a frontline nurse, educator, and researcher in this area.

I have had the privilege to be present and care for many birthing and postpartum individuals and their families. My first immersive clinical maternity experiences occurred during my final undergraduate preceptorship. I had the opportunity to be an international student and preceptor with midwives in a rural hospital in Mandurah, Australia. The midwifery approaches to care were introduced to me in this setting and have continued to influence my nursing practice. The midwifery approaches that I believe are deeply rooted in my practice include respect, safety, honoring the person's choices, and promoting self-determination. Following graduation, I was hired as a registered nurse in the labour, delivery, and postpartum unit in a hospital located in Red Deer, Alberta. I have learned from each pregnant and postpartum person on this journey. This aligns with birthing expert Simkin (2016) who believes you learn best from your patients. I have also been a nursing instructor for fifteen years and have facilitated and fostered learning in the maternal child nursing and research courses in a Bachelor of Science Undergraduate Nursing program. With each student I have worked with, I have learned more because of their questions and observations. I have been developed my research capacities through ongoing research endeavours; roles have included primary investigator, co-investigator, and research assistant.

In the case of the research topic for this PhD thesis, substance use in pregnancy, I met a patient with a history of substance use and infant apprehension that stimulated me to commit to doing more. The immediate action equated to advocating for the individual to have the opportunity to further "prove" herself and keep her baby since she had not used substances during this pregnancy. This clinical encounter and my overall observations of increased

substance use among pregnant individuals over the past few years led me to commit to a PhD where I would have expert support to do research and improve care outcomes for this population. I have been in many clinical situations where I witnessed discomfort among providers, creating reluctance on the part of the professionals, and recognized an urgent need to improve care for pregnant individuals who used substances. I believed a PhD was the best way to gain expert research guidance and build a program of research. I committed to pursue a PhD in 2019 and have had the opportunity to work with faculty and a PhD committee with knowledge in research, policy, Indigenous approaches, and maternal child health. My PhD committee is committed to conducting ethical research that makes a difference and centers the patient as the expert in care experiences. The patient participants in this thesis research all provided wisdom, guidance, and insight into the system that I did not have.

As a white settler, I have critically examined my own biases in the last four years largely driven by personal growth and engagement with my PhD research topic. I had been complicit in many situations and stood by when structural racism continued around me. I have continued to make daily commitments to do better and be braver when inequities and racism occurs. I have birthed two children, one with midwifery care and the other with a family physician. I recognize that I will always see things from a place of privilege and will never fully understand the challenges that many others have endured. Much of what I have has been given to me and I have not endured adverse childhood events. I have family members impacted by substance use and have witnessed the many challenges they have faced when I have attended health care appointments with them as a support person, including during pregnancy. I have committed to learning through research with patients and key stakeholders to identify better ways to improve health equity and care. Working with Knowledge Carrier and Grandmother Shingoose has been

an absolute privilege. The wisdom and teachings that have been offered to me while doing this research have not gone unnoticed. Although it is difficult to capture all of them in writing, they have and will continue to impact my practice, research priorities, and how these findings are disseminated. A few teachings of significance include honoring the pregnant individual as a sacred water and baby carrier, and the importance of listening and learning from each person no matter how much they shared during the interview.

Thesis Considerations

Overall, the thesis aimed to highlight an interprofessional care team that supports pregnant individuals who use substances and share patients' experiences with the interprofessional care team that they have kindly offered. I did not provide care in the clinic or work with any of the patients in any capacity. Principles of Truth and Reconciliation are endorsed in this thesis and ways to further promote cultural safety in the research were guided by Grandmother and Indigenous Knowledge Keeper Shingoose. Noting that not all child-bearing individuals identify as female, language in this thesis is intended to be gender-neutral. There are researchers and patient participants that have shared their specific gender, and they will be addressed accordingly.

Epistemological Foundations

What constitutes knowledge, what kinds of knowledge are possible, and who is a knower are established within a philosophy or epistemology (Campbell & Bunting, 1991; Crotty, 1998). Philosophical assumptions about knowledge are inherent in all research and in the theoretical perspectives and methodologies used to conduct it (Crotty, 1998). All researchers come with a particular epistemological stance. In this section, I discuss constructionism as the epistemological foundation for this thesis. A constructionist approach allows for a flexible

methodological approach (Mills, 1997) and acknowledges that subjectivity applies to the research (Charmaz, 2006).

Constructionism

Constructionism within qualitative research focuses on the active role of individuals in constructing meaning and understanding of the social world. This was important to the research team and fitting for the qualitative phase of the research that aimed to honor and amplify the patient's voice. It is vital to include the patient voice to improve healthcare practices, outcomes, and patient satisfaction, but also to address injustices suffered by underrepresented populations (Saigle et al., 2021). The reality an individual constructs evolves through ongoing interactions and interpretations between self and the social environment (Crotty, 1998). The aim of our qualitative research was to understand how pregnant individuals who use substances made sense of their experiences and values within the context of an interprofessional maternity clinic. Constructionist researchers explore how peoples' subjective interpretations, perspectives, and cultural backgrounds shape their understanding of the world (Crotty, 1998; McEwen & Wills, 2014).

For this qualitative research study, we employed appreciative inquiry as the research method which aligned with constructionism epistemology. This is further described in Chapter 3. The principles of constructionism in qualitative research are discussed below. Further explanation of how they relate to the qualitative research process is also offered.

1. Social Construction: Constructionism emphasizes that reality is socially constructed, meaning that people collectively create meanings, values, and norms through their interactions and shared understandings. The focus in research is on how individuals

and groups make sense of their experiences and construct their social worlds (Slater, 2017).

2. Interpretation and Multiple Perspectives: Constructionist researchers recognize that different individuals and groups may interpret and understand the same phenomenon in various ways. They aim to explore the diverse meanings and perspectives that emerge from social interactions, highlighting the subjective nature of reality (Carroll et al., 2008; Slater, 2017).
3. Contextual Understanding: Constructionism emphasizes the importance of understanding the social, cultural, and historical context within which meanings are constructed (Slater, 2017).
4. Reflexivity: Constructionist researchers acknowledge their own positionality and biases as they engage with research participants (Carroll et al., 2008; Thorne, 2016). They reflect on how their own interpretations and perspectives may shape the research process and findings. Reflexivity allows for a more nuanced understanding of the multiple realities and experiences within a research context (Thorne et al, 2016).
5. Empirical Investigation: While constructionism focuses on subjective interpretations, it also values empirical investigation (Slater, 2017). Researchers can use qualitative methods such as interviews to gather rich data to capture the complexities of individuals' construction of meaning (Thorne , 2016).

By adopting a constructionist approach, qualitative researchers aim to uncover the dynamic context and socially negotiated nature of reality (Slater, 2017). This perspective allows

for a deeper understanding of how individuals and groups actively participate in shaping their social worlds and offers insights into the complexities of human experiences.

Objective & Structure of the Thesis

The purpose of this thesis was to critically examine interprofessional maternity care models among pregnant individuals who use substances. A paper-based thesis was undertaken to meet the objectives of the research.

Chapter 2: Scoping Review of Interprofessional Care Teams and Models

The scoping review provided a comprehensive summation of roles and characteristics of interprofessional care providers along with care modes for pregnant and early parenting persons who use substances. Scoping reviews address more complex and exploratory research questions, which identifies key concepts and gaps in the evidence (Arksey & O'Malley, 2005). The Arksey and O'Malley (2005) 5-stage framework for conducting scoping reviews guided the research process along with the updated recommendations from Levac et al. (2010). We conducted a systematic search for articles from health-related databases. Search terms included interprofessional, perinatal, and substance use along with corresponding mesh terms. The Preferred Reporting Items for Systematic Reviews for Scoping Reviews (PRISMA -ScR) was followed (Moher et al., 2009). We screened 645 studies to assess for full text eligibility. Eleven articles met full inclusion criteria and were summarized. Optimal care models exist that included various care providers from multiple health care professions. The few key care provider characteristics and attributes that were identified in the articles were being nonjudgmental, trusting, and relational. Many of the interprofessional care models have successfully blended social, primary care, pregnancy care, and addictions care. The success and sustainability of

programs varies, and more work I needed to evaluate program and patient outcomes. Chapter 2 further describes the scoping review and presents the paper submitted for publication.

Chapter 3: Appreciative Inquiry as Research Method

Appreciative inquiry was selected as the research method for the qualitative study (Reed, 2007). The appreciative inquiry approach was considered appropriate as it focused on a strengths-based approach for exploring the perceptions of pregnant individuals and women who use substances and their experiences with an interprofessional maternity care model. The appreciative inquiry research method integrates trauma informed care and culturally safe approaches. The data was collected via semi-structured interviews and appreciate inquiry was used to identify the existing strengths and opportunities to improve the care model.

Chapter 4: A Qualitative Exploratory Study on Interprofessional Maternity Care Models

The objective of this paper was to explore how pregnant and postpartum individuals who use substances experience the healthcare system with an interprofessional maternity team. These objectives were addressed through a qualitative exploratory study guided by the appreciative inquiry research method approach (Cooperrider & Whitney, 2005; Mohr & Watkins, 2002). The study participants were recruited from a Maternity Ambulatory Care Clinic within a large urban university affiliated tertiary care hospital. The participants included nine postpartum and five prenatal individuals with substance involved pregnancies who engaged in care with an interprofessional maternity care team. Substance use included opioids (codeine, fentanyl, morphine, heroin), marijuana, and methamphetamine. Semi-structured interviews were conducted face to face and on the phone. All fourteen participants who had used substances during their pregnancy discussed the nuances of an interprofessional maternity care model during

prenatal, birth, and/or postpartum care experiences. The interprofessional maternity care team in the clinic included the midwife, obstetrician, and psychiatrist.

Strategies were identified from a strength based appreciative inquiry lens and the patient perspective to improve safe, dignified, and compassionate care for individuals during the prenatal, intrapartum, and early postpartum period. Participants described safe care as nonjudgmental, reassuring, peaceful, and inclusive of harm reduction approaches; compassionate care as kindness and listening; and dignified care as encompassing acceptance and deserving care along with honoring natural supports. Connection was identified as a necessity, described as a trustful relationship with continuity of care between the patient and providers. Our findings captured the strengths of an interprofessional maternity care team during their patient experiences. The participants identified the importance of actionable, safe, compassionate, dignified, and connected ways to interact with patients who have used substances.

Chapter 5: Discussions & Conclusion

The final chapter provides a summary and discussion of the thesis findings, notable differences in findings, and reiterates the importance of the findings in clinical practice. Limitations of the thesis are also offered. Finally, the knowledge translation strategies and areas for future research are discussed.

Significance of this Paper-Based Thesis

This research highlights the various interprofessional maternity care models and describes ways in which patients are impacted by an interprofessional maternity care team. The scoping review highlights the patient and program outcomes of the interprofessional care model approach for pregnant individuals who use substances. The patient participants interviewed in the qualitative study offered insight into what safe, compassionate, dignified, and connected care

is from their perspective with the interprofessional maternity care team. The WHO (2014) emphasized that all stakeholders, including women who use substances, must be involved in the process to ensure that respectful care approaches are identified.

The patients who participated in this study articulated actionable ways for providers to interact in a safe, compassionate, dignified, and connected way. The findings from both phases of research were shared in a timely way with the interprofessional maternity care team and key stakeholders where the research took place. This allowed knowledge translation that led to actionable ways to improve practice based on best practice, inclusive of patient perspectives.

References

Achilles, J. S., & Castaneda-Lovato, J. (2019). A quality improvement initiative to improve the care of infants born exposed to opioids by implementing the eat, sleep, console assessment tool. *Hospital Pediatrics*, *9*(8), 624–631. https://doi.org/10.1542/hpeds.2019-0144

Allan, B., & Smylie, J. (2015). *First peoples, second class treatment*. https://policycommons.net/artifacts/1204263/first-peoples-second-class-treatment/1757369/

Anderson, J. M., Rodney, P., Reimer-Kirkham, S., Browne, A. J., Khan, K. B., & Lynam, M. J. (2009). Inequities in health and healthcare viewed through the ethical lens of critical social justice: Contextual knowledge for the global priorities ahead. *Advances in Nursing Science*, *32*(4), 282–294. https://doi.org/10.1097/ANS.0b013e3181bd6955

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557052000119616

Association of Women's Health, Obstetric and Neonatal Nurses. (2019). Optimizing outcomes for women with substance use disorders in pregnancy and the postpartum period. *Journal of Obstetric, Gynecologic, and Neonatal Nursing : JOGNN*, *48*(5), 583–585. https://doi.org/10.1016/j.jogn.2019.06.001

Balneaves, L., Brown, A., Green, M., Prosk, E., Rapin, L., Monahan-Ellison, M., McMillan, E., Zaid, J., Dworkind, M., & Waiting, C. (2023). *Medical cannabis access and experiences in Canada*.

https://static1.squarespace.com/static/61cf68c3e7f7444a96b5c047/t/642c7d2fbde575503e411b4a/1680637234265/MCAS+Report+April+4+2023.pdf

Biggar, E., Papamihali, K., Leclerc, P., Hyshka, E., Graham, B., Taylor, M., Payer, D., Maloney-Hall, B., & Buxton, J. A. (2021). Towards cross-Canada monitoring of the unregulated street drug supply. *BMC Public Health*, *21*(1), 1678. https://doi.org/10.1186/s12889-021-11757-x

Binka, M., Butt, Z. A., Wong, S., Chong, M., Buxton, J. A., Chapinal, N., Yu, A., Alvarez, M., Darvishian, M., Wong, J., McGowan, G., Torban, M., Gilbert, M., Tyndall, M., Krajden, M., & Janjua, N. Z. (2018). Differing profiles of people diagnosed with acute and chronic hepatitis B virus infection in British Columbia, Canada. *World Journal of Gastroenterology: WJG*, *24*(11), 1216–1227. https://doi.org/10.3748/wjg.v24.i11.1216

Blount, T., Painter, A., Freeman, E., Grossman, M., & Sutton, A. G. (2019). Reduction in length of stay and morphine use for NAS with the "Eat, Sleep, Console" method. *Hospital Pediatrics*, *9*(8), 615–623. https://doi.org/10.1542/hpeds.2018-0238

Browne, A. J., Smye, V. L., Rodney, P., Tang, S. Y., Mussell, B., & O'Neil, J. (2011). Access to primary care from the perspective of Aboriginal patients at an urban emergency department. *Qualitative Health Research*, *21*(3), 333–348. https://doi.org/10.1177/1049732310385824

Browne, A. J, Varcoe, C., Lavoie, J., Smye, V., Wong, S. T., Krause, M., Tu, D., Godwin, O., Khan, K., & Fridkin, A. (2016). Enhancing health care equity with Indigenous populations: Evidence-based strategies from an ethnographic study. *BMC Health Services Research*, *16*(544). https://doi.org/10.1186/s12913-016-1707-9.

Bruzelius, E., & Martins, S. S. (2022). US trends in drug overdose mortality among pregnant and postpartum persons, 2017-2020. *JAMA: The Journal of the American Medical Assocation, 328*(21), 2159-2161. doi:10.1001/jama.2022.17045

Bushnik, T., Yang, S., Kaufman, J. S., Kramer, M. S., & Wilkins, R. (2017). Socioeconomic disparities in small-for-gestational-age birth and preterm birth. *Health Reports*, *28*(11), 3–10. https://www150.statcan.gc.ca/n1/pub/82-003-x/2017011/article/54885-eng.htm

Campbell, J. C., & Bunting, S. (1991). Voices and paradigms: Perspectives on critical and feminist theory in nursing. *ANS. Advances in Nursing Science*, *13*(3), 1–15. https://doi.org/10.1097/00012272-199103000-00004

Carroll, J.-A., Adkins, B., Foth, M., Parker, E., & Jamali, S. (2008). My place through my eyes: A social constructionist approach to researching the relationships between socioeconomic living contexts and physical activity. *International Journal of Qualitative Studies on Health and Well-Being*, *3*(4), 204–218. https://doi.org/10.1080/17482620802401188

Charmaz, K. (2006). Meaning pursuits, marking self: Meaning construction in chronic illness. *International Journal of Qualitative Studies on Health and Well-Being, 1*(1), 2737. https://doi.org/10.1001/jama.2022.17045

Cooperrider, D. L., & Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change*. Barrett-Koehler Publisher.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage.

De Souza, R. (2015). Culturally safe care for ethnically and religiously diverse communities. In D. Wepa (Ed.), *Cultural safety in Aotearoa New Zealand* (2nd ed., pp. 189–203). Cambridge University Press.

Denison, J., Varcoe, C., & Browne, A. J. (2014). Aboriginal women's experiences of accessing health care when state apprehension of children is being threatened. *Journal of Advanced Nursing*, *70*(5), 1105–1116. https://doi.org/10.1111/jan.12271

Dixon-Woods, M., Cavers, D., Agarwal, S., Annandale, E., Arthur, A., Harvey, J., Hsu, R., Katbamna, S., Olsen, R., Smith, L., Riley, R., & Sutton, A. J. (2006). Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Medical Research Methodology*, *6*(1), 35. https://doi.org/10.1186/1471-2288-6-35

Dumas, L., Lepage, M., Bystrova, K., Matthiesen, A.-S., Welles-Nyström, B., & Widström, A.-M. (2013). Influence of skin-to-skin contact and rooming-in on early mother-infant interaction: A randomized controlled trial. *Clinical Nursing Research*, *22*(3), 310–336. https://doi.org/10.1177/1054773812468316

Ecker, J., Abuhamad, A., Hill, W., Bailit, J., Bateman, B. T., Berghella, V., Blake-Lamb, T., Guille, C., Landau, R., Minkoff, H., Prabhu, M., Rosenthal, E., Terplan, M., Wright, T. E., & Yonkers, K. A. (2019). Substance use disorders in pregnancy: Clinical, ethical, and research imperatives of the opioid epidemic: A report of a joint workshop of the Society for Maternal-Fetal Medicine, American College of Obstetricians and Gynecologists, and American Society of Addiction Medicine. *American Journal of Obstetrics and Gynecology*, *221*(1), B5–B28. https://doi.org/10.1016/j.ajog.2019.03.022

Foucault, M. (1978). *The history of sexuality*. (Vol.1, Hurlye, Trans.). Pantheon.

Frazer, Z., McConnell, K., & Jansson, L. M. (2019). Treatment for substance use disorders in pregnant women: Motivators and barriers. *Drug and Alcohol Dependence*, *205*(107652), 107652. https://doi.org/10.1016/j.drugalcdep.2019.107652

Gergen, K. J. (2023). The social sciences as future forming. *Possibility Studies & Society*, 275386992311576. https://doi.org/10.1177/27538699231157624

Goodman, A., Fleming, K., Markwick, N., Morrison, T., Lagimodiere, L., Kerr, T., & Western Aboriginal Harm Reduction Society. (2017). Corrigendum to "They treated me like crap and I know it was because I was Native": The healthcare experiences of Aboriginal peoples living in Vancouver's inner city [Soc. Sci. & Med. 178 (2017) 87-94]. *Social Science & Medicine (1982)*, *184*, 187. https://doi.org/10.1016/j.socscimed.2017.04.050

Government of Canada. (2018). *Strengthening Canada's approach to substance use issues*. https://www.canada.ca/en/health-canada/services/substance-use/canadian-drugs-substances-strategy/strengthening-canada-approach-substance-use-issue.html

Government of Canada. (2023). *Opioid- and stimulant-related harms*. Canada.Ca. https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/

Graves, L. E., Green, C. R., Robert, M., & Cook, J. L. (2020). Methamphetamine use in pregnancy: A call for action. *Journal of Obstetrics and Gynaecology Canada,* 43(8), 1001-1004. doi.org/10.1016/j.jogc.2020.11.017.

Gulbransen, K., Thiessen, K., Pidutti, J., Watson, H., & Winkler, J. (2021). Scoping review of best practice guidelines for care in the labor and birth setting of pregnant women who use methamphetamines. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN*, S0884-2175(21)00305-1. Advance online publication.

Guttmann, A., Blackburn, R., Amartey, A., Zhou, L., Wijlaars, L., Saunders, N., Harron, K., Chiu, M., & Gilbert, R. (2019). Long-term mortality in mothers of infants with neonatal abstinence syndrome: A population-based parallel-cohort study in England and Ontario,

Canada. *PLoS Medicine*, *16*(11), e1002974. https://doi.org/10.1371/journal.pmed.1002974

Hatzenbuehler, M. L., Jun, H.-J., Corliss, H. L., & Bryn Austin, S. (2015). Structural stigma and sexual orientation disparities in adolescent drug use. *Addictive Behaviors*, *46*, 14–18. https://doi.org/10.1016/j.addbeh.2015.02.017

Haycraft, A. L. (2018). Pregnancy and the opioid epidemic. *Journal of Psychosocial Nursing and Mental Health Services*, *56*(3), 19–23. https://doi.org/10.3928/02793695-20180219-03

Holt, K., & French, G. (2019). Exploring the motherhood experiences of active methamphetamine users. *Crime, Law, and Social Change, 73,* 297-314. https://doi.org/10.1016/j.jogn.2021.10.008

Horrill, T., McMillan, D. E., Schultz, A. S. H., & Thompson, G. (2018). Understanding access to healthcare among Indigenous peoples: A comparative analysis of biomedical and postcolonial perspectives. *Nursing Inquiry*, *25*(3), e12237. https://doi.org/10.1111/nin.12237

Hubberstey, C., Rutman, D., Van Bibber, M., & Poole, N. (2022). Wraparound programmes for pregnant and parenting women with substance use concerns in Canada: Partnerships are essential. *Health & Social Care in the Community*, *30*(5), e2264-e2276. https://doi.org/10.1111/hsc.13664

Jones, H. E., Deppen, K., Hudak, M. L., Leffert, L., McClelland, C., Sahin, L., Starer, J., Terplan, M., Thorp, J. M., Jr, Walsh, J., & Creanga, A. A. (2014). Clinical care for opioid-using pregnant and postpartum women: the role of obstetric providers. *American Journal of Obstetrics and Gynecology*, *210*(4), 302–310. https://doi.org/10.1016/j.ajog.2013.10.010

Jones, C., Duea, S., Griggs, K., Johnstone, W., Jr, & Kinsey, D. (2021). Improving outcomes of mothers with Opioid Use Disorder using a community collaborative model. *Journal of Primary Care & Community Health*, *12*, 21501327211052400. https://doi.org/10.1177/21501327211052401

Kalaitzopoulos, D.R., Chatzistergiou K., Amylidi A.L., Kokkinidis, D.G., & Goulis, D.G. (2018). Effect of methamphetamine hydrochloride on pregnancy outcome: A systematic review and meta-analysis. *Journal of Addiction Medicine, 12*(3),220-226, doi:10.1097/ADM.0000000000000391.

King, Laros, R. K., & Parer, J. T. (2012). Interprofessional Collaborative Practice in Obstetrics and Midwifery. Obstetrics and Gynecology Clinics of North America, 39(3), 411–422. https://doi.org/10.1016/j.ogc.2012.05.009

Kitching, G. T., Firestone, M., Schei, B., Wolfe, S., Bourgeois, C., O'Campo, P., Rotondi, M., Nisenbaum, R., Maddox, R., & Smylie, J. (2020). Unmet health needs and discrimination by healthcare providers among an Indigenous population in Toronto, Canada. *Canadian Journal of Public Health. Revue Canadienne de Sante Publique*, *111*(1), 40–49. https://doi.org/10.17269/s41997-019-00242-z

Klaman, S.I., Isaacs, K., Leopold, A., Perpich, J., Hayashi, S., Vender, J., Campopiano, M., & Jones, H. E. (2017). Treating women who are pregnant and parenting for opioid use disorder and the concurrent care of their infants and children: Literature review to support national guidance. *Journal of Addiction Medicine, 11*(3), 178–190. doi.org/10.1097/adm.0000000000000308

Krans, E.E., Campopiano, M., Cleveland, L.M., Goodman, D., Kilday, D., Kendig, S., Leffert, L. R., Main, E. K., Mitchell, K. T., O'Gurek, D. T., D'Oria, R., McDaniel, D., & Terplan, M.

(2019). National partnership for maternal safety: Consensus bundle on obstetric care for women with opioid use disorder. *Obstetrics & Gynecology, 134*(2), 365–375. doi.org/10.1097/aog.0000000000003381

Levac, D., Colquhoun, H., & O'Brien, K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, *5*(69). https://doi.org/10.1186/1748-5908-5-69

Li, Talari, P., Kelly, A., Latham, B., Dotson, S., Manning, K., Thornsberry, L., Swartz, C., & Williams, M. V. (2018). Interprofessional Teamwork Innovation Model (ITIM) to promote communication and patient-centred, coordinated care. BMJ Quality & Safety, 27(9), 700–709. https://doi.org/10.1136/bmjqs-2017-007369

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In N. K. Denzin & Y. S. Lincoln (Eds.), *SAGE handbook of qualitative research* (4th ed., pp. 97–128). Sage.

Mahoney, K., Reich, W., & Urbanek, S. (2019). Substance abuse disorder: Prenatal, intrapartum, and postpartum care. *Journal of Maternal Child Nursing, 44*(5), 284-285.

McEwen, M., & Wills, E. (2014). *Theoretical basis for nursing* (4th ed.). Wolters Kluwer Health.

McLafferty, L.P., Becker, M., Dresner, N., Meltzer-Brody, S., Gopalan, P., Glance, J., St. Victor, G., Mittal, L. Marshalek, P., Lander, L., & Worley, L. (2016). Guidelines for the management of pregnant women with substance use disorders. *Psychosomatics, 57*(2), 115-130. doi.org/10.1016/j.psym.2015.12.001

McLellan, A. T. (2017). Substance misuse and substance use disorders: Why do they matter in healthcare? *Transactions of the American Clinical and Climatological Association*, *128*, 112–130. https://pubmed.ncbi.nlm.nih.gov/28790493/

Mills, S. (1997). *Discourse*. Routledge.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ (Clinical Research Ed.)*, *339*(jul21 1), b2535. https://doi.org/10.1136/bmj.b2535

Mohr, B. J., & Watkins, J.M. (2002). *The essentials of appreciative inquiry: A roadmap for creating positive futures*. https://www.academia.edu/3369203/The_essentials_of_appreciative_inquiry_A_roadmap_for_creating_positive_futures

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ (Clinical Research Ed.)*, *339*(jul21 1), b2535. https://doi.org/10.1136/bmj.b2535

Motavalli, D., Taylor, J., Childs, E., Valente, P., Salhaney, P., Olson, J., Biancarelli, D., Edeza, A., Earlywine, J., Marshall, B., Drainoni, M., Mimiaga, M., Biello, K., & Bazzi, A. (2020). "Health is on the back burner:" Multilevel barriers and facilitators to primary care among people who inject drugs. *Journal of General Internal Medicine : JGIM*, *36*(1), 129–137. doi.org/10.1007/s11606-020-06201-6.

National Institute on Drug Abuse. (2020, January 22). *Substance use in women DrugFacts.* https://www.drugabuse.gov/publications/drugfacts/substance-use-in-women

Nelson, S. E., & Wilson, K. (2018). Understanding barriers to health care access through cultural safety and ethical space: Indigenous people's experiences in Prince George, Canada. *Social Science & Medicine (1982)*, *218*, 21–27. https://doi.org/10.1016/j.socscimed.2018.09.017

Nickel, N. C., Enns, J. E., Freier, A., McCulloch, S. C., Chartier, M., Casidsid, H. J. M., Balogun, O. D., Mulhall, D., Dragan, R., Sarkar, J., Bolton, J., Konrad, G., Phillips-Beck, W., Sanguins, J., Shimmin, C., McDonald, N., Mignone, J., Hinds, A., & Methamphetamine Use In Manitoba Research Team. (2022). Characterising methamphetamine use to inform health and social policies in Manitoba, Canada: A protocol for a retrospective cohort study using linked administrative data. *BMJ Open*, *12*(10), e062127. https://doi.org/10.1136/bmjopen-2022-062127

O'Connor, A., & McLaurin, R. (2016). Comprehensive care for women with alcohol and other drug use: The women and newborn drug and alcohol service, Perth. *Australian Midwifery News*, *16*(3), 20–21. https://doi.org/10.3316/informit.366788483443264

Ordean, A., Wong, S., & Graves, L. (2017). No. 349-Substance use in pregnancy. *Journal of Obstetrics and Gynaecology Canada*, *39*(10), 922-937.e2. https://doi.org/10.1016/j.jogc.2017.04.028

Papps, E., & Ramsden, I. (1996). Cultural safety in nursing: The New Zealand experience. *International Journal for Quality in Health Care*, *8*(5), 491–497. https://doi.org/10.1093/intqhc/8.5.491

Perez, F. A., Blythe, S., Wouldes, T., McNamara, K., Black, K. I., & Oei, J. L. (2022). Prenatal methamphetamine-impact on the mother and child-a review. *Addiction (Abingdon, England)*, 10.1111/add.15509. Advance online publication. https://doi.org/10.1111/add.15509

Pierce, S. L., Zantow, E. W., Phillips, S. D., & Williams, M. (2019). Methamphetamine-associated cardiomyopathy in pregnancy: A case series. *Mayo Clinic Proceedings. Mayo Clinic*, *94*(3), 551–554. https://doi.org/10.1016/j.mayocp.2018.12.008

Reed, J. (2007). *Appreciative inquiry: Research for change.* Sage.

Renbarger, K.M., Shieh, C., Moorman, M., Latham-Mintus, K., & Draucker, C. (2020). Health care encounters of pregnant and postpartum women with substance use disorders. *Western Journal of Nursing Research, 42* (8), 612-628. doi.org/10.1177%2F0193945919893372

Rutman, D., & Hubberstey, C. (2019). National evaluation of Canadian multi-service FASD prevention programs: Interim findings from the Co-Creating Evidence study. *International Journal of Environmental Research and Public Health*, *16*(10), 1767. https://doi.org/10.3390/ijerph16101767

Rutman, D., Hubberstey, C., Poole, N., Schmidt, R.A., & Van Bibber, M. (2020). Multi-service prevention programs for pregnant and parenting women with substance use and multiple vulnerabilities: Program structure and clients' perspectives on wraparound programming. *BMC Pregnancy and Childbirth, 20*, 441. http://doi.org/10.1186/s12884-020-03109-1

Saigle, V., Miller, J., Dumez, V., & Patrick, K. (2021). Embedding patient voices in CMAJ. *Journal de l'Association Medicale Canadienne [Canadian Medical Association Journal]*, *193*(27), E1046–E1047. https://doi.org/10.1503/cmaj.211092

Scaria, M. K. (2016). Role of care pathways in interprofessional teamwork. *Nursing Standard (Royal College of Nursing (Great Britain): 1987*, *30*(52), 42–47. https://doi.org/10.7748/ns.2016.e10402

Shahram, S., Bottorff, J., Oelke, N., Dahlgren, L., Thomas, V., & Spittal, P. (2017). The cedar project: Using indigenous-specific determinants of health to predict substance use among young pregnant-involved aboriginal women. *BMC Women's Health*, *17*(1).

Seng, J., & Taylor, J. (Eds.). (2015). *Trauma informed care in the perinatal period* (1st ed.). Dunedin Academic Press.

Seybold, D., Calhoun, B., Burgess, D., Lewis, T., Gilbert, K., & Casto, A. (2014). Evaluation of a training to reduce provider bias toward pregnant patients with substance abuse. *Journal of Social Work Practice in the Addictions*, *14*(3), 239–249. doi.org/10.1080/1533256X.2014.933730

Shirley-Beaven, S., Roig, A., Bure-Shyne, N., Daniels, C., & Csak, R. (2020). Women and barriers to harm reduction services: A literature review and initial findings from a qualitative study in Barcelona, Spain. *Harm Reduction Journal, 17*(78). doi.org/10.1186/s12954-020-00429-5

Simkin, P. (2016, February 18). *The essence of coping in labor* [Video]. Youtube. https://www.youtube.com/watch?v=1Y-Li_r5IoE

Slater, J. (Ed.) (2017). *The SAGE encyclopedia of communication research method* . (Vols. 1-4). SAGE. https://doi.org/10.4135/9781483381411

Stengel, C. (2014). The risk of being 'too honest': Drug use, stigma, and pregnancy. *Health Risk Sociology, 16*, 36–50. https://doi.org/10.1080/136598575.2013.8684408

Streubert Speziale, H. J., & Carpenter, D. R. (2003). *Qualitative research in nursing* (3rd ed.). Lippincott Williams & Wilkins.

Tang, S. Y., & Browne, A. J. (2008). "Race" matters: Racialization and egalitarian discourses involving Aboriginal people in the Canadian health care context. *Ethnicity & Health*, *13*(2), 109–127. https://doi.org/10.1080/13557850701830307

Tang, S. Y., Browne, A. J., Mussell, B., Smye, V. L., & Rodney, P. (2015). "Underclassism" and access to healthcare in urban centres. *Sociology of Health & Illness*, *37*(5), 698–714. https://doi.org/10.1111/1467-9566.12236

Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice* (2nd ed.). Routledge.

Tunçalp, Ö., Were, W. M., MacLennan, C., Oladapo, O. T., Gülmezoglu, A. M., Bahl, R., Daelmans, B., Mathai, M., Say, L., Kristensen, F., Temmerman, M., & Bustreo, F. (2015). Quality of care for pregnant women and newborns-the WHO vision. *BJOG: An International Journal of Obstetrics and Gynaecology*, *122*(8), 1045–1049. https://doi.org/10.1111/1471-0528.13451

World Health Organization. (2010). *Framework for action on interprofessional education & collaborative practice*. https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice

World Health Organization. (2014). *Guidelines for identification and management of substance use and substance use disorders in pregnancy.* https://www.who.int/publications/i/item/9789241548731

Wylie, L., & McConkey, S. (2019). Insiders' insight: Discrimination against Indigenous peoples through the eyes of health care professionals. *Journal of Racial and Ethnic Health Disparities*, *6*(1), 37–45. https://doi.org/10.1007/s40615-018-0495-9

Chapter 2: Scoping Review of Interprofessional Care Team and Models

Preamble

Chapter 2 presents the first step taken to critically examine interprofessional care models for pregnant individuals who use substances. A scoping review was conducted of the published literature to map the current state of literature on interprofessional care models. We systematically searched for articles from health-related databases and screened 645 studies for full text eligibility further highlighted the gaps in the literature. It was determined that literature on interprofessional maternity care models for pregnant individuals who use substances provided limited reporting on patient and program outcomes. Additionally, few details on the roles and characteristics of each interprofessional care team are offered in the extant literature.

The scoping review findings are reported in a paper submitted for publication. The paper includes a narrative summary of the eleven articles that met full inclusion criteria. Optimal interprofessional care models identified in the literature included various care providers from multiple health care professions attempting to provide comprehensive care for pregnant individuals who use substances. The few care provider characteristics and attributes identified were nonjudgmental, trusting, and relational. Many of the interprofessional care models have successfully blended social, primary care, pregnancy care, and addictions to provide wraparound care in the community setting. Overall, the scoping review provided a broad synopsis of what is known in this area and identified key gaps in the extant research. The scoping review informed *Phase 2* of the thesis research which involved patients who received care from an interprofessional maternity care team.

Author Contributions:

This paper was submitted for publication in February 2023 and has been approved by the editorial staff. As the student, I led the team in all stages of the scoping review. Consultation from my thesis supervisor, Dr. Thiessen also occurred through all the scoping review stages. I conceptualized the research questions, developed the search strategy, and conducted the literature search in collaboration with Christine Neilson (Medical Health Librarian, University of Manitoba), screened studies for inclusion, trained and developed the data extraction form in Covidence, synthesized and analyzed the included studies. Natalie Ford is a maternal child advanced practice nurse who was the second reviewer for the scoping review. She reviewed all sources, full text articles, and extracted data from the articles for comparison. Dr. Watson and Dr. Gregory provided critical feedback throughout the development of the manuscript.

Appendices associated with this chapter:

Appendix A – Sample search strategy.

Appendix B – PRISMA-ScR checklist (not included in the paper submitted for publication).

Appendix C – Data extraction form from Covidence (not included in the paper submitted for publication).

Copyright

The article has been submitted to a journal and is under review. Authors can include versions of articles in full or in part in a thesis or dissertation for non-commercial purposes.

Title: Interprofessional Care Models for Pregnant and Early-parenting Individuals who use Substances: A Scoping Review

Authors: Gulbransen, K, Thiessen, K., Ford, N., Watson, H. & Gregory, P.

Acknowledgements: Christine Neilson, medical librarian, University of Manitoba

Abstract

Introduction: Use of substances during pregnancy is a global health concern. Interprofessional care teams are an optimal care approach to engage perinatal individuals who use substances.

Objective: The purpose of this scoping review is to provide a comprehensive summation of published literature reporting on interprofessional care models for perinatal individuals who use substances and subsequently identify the interprofessional care team roles, program and/or provider characteristics and care outcomes of these models.

Methods: We conducted a systematic search for articles from health-related databases. Search terms included interprofessional, perinatal, and substance use along with corresponding mesh terms. The Preferred Reporting Items for Systematic Reviews for Scoping Reviews (PRISMA - ScR) was followed.

Results: We screened 645 publications to assess for full text eligibility. Eleven articles met full inclusion criteria and were summarized. Optimal care models exist that include various care providers from multiple health care professions providing collaborative wraparound care. Programs were built on co-location of services, partnership with other agencies, available group/peer support and approaches inclusive of cultural care, trauma informed care, and harm reduction principles.

Conclusions: Many of the interprofessional care models have successfully blended social, primary care, pregnancy care, and addictions care. The success and sustainability of programs varies, and more work is needed to evaluate program and patient outcomes.

Introduction

Substance use during the perinatal period is a global health care concern and can result in grave consequences over the continuum of pregnancy through postpartum[1,2]. Substance use is broadly defined as use of alcohol, and illicit substances such as opioids and stimulants. Worldwide, the majority of deaths attributed to substance use are related to opioid use [3]. To positively influence maternal and neonatal outcomes for perinatal individuals who use substances, the standard of care should include a wraparound approach addressing psychosocial, medical, and basic needs of the person [2,4]. Ideally a care model for perinatal individuals who use substances would include an interprofessional collaborative care team [5]. Health care providers that work collectively to meet the needs of a community and provide wraparound care improves patient care, especially for those patients with complex and/or chronic conditions [4,6, 7].

Health care providers and international health organizations have identified care and treatment for substance use in pregnancy as a priority as it continues to impact maternal mortality and morbidity [4,8]. Pregnant individuals who use substances are recommended to intersect with various health care providers and the health care system throughout the continuum of pregnancy, birth, and postpartum [8]. Interactions with health care providers can leave lasting impressions on patients and families; those that are judgmental, and stigmatizing may last even longer [9]. Many clients enter pregnancy with feelings of guilt, shame, and uncertainty when they have used or use substances [10]. This may impede access to health care services due to a fear of punitive and legalistic consequences [11]. The interprofessional care team is well positioned to collaborate with perinatal individuals who use substances in effort to improve maternal and neonatal outcomes and establish a safe trusting relationship within the existing

health care system. An interprofessional care team is defined as a group of individuals from different professions that share knowledge with each other to enable effective collaboration and improve health outcomes [6].

Background

Pregnancy can be a pivotal time for individuals who use substances to make life changes [2,12]. Some pregnant individuals who use substances can stop using substances when they learn they are pregnant; others continue to face addiction and related health and social challenges when pregnant [5]. Addiction is a complex disease involving changes to the thinking processes in the brain [13]. There is no single factor that determines if an individual will become addicted or not. Regardless of current substance use all deserve access to nonjudgmental health care; access to prenatal care during pregnancy is an influential precursor for positive birth outcomes [12,14]. Perinatal experts from North America and Australia have emphasized the benefits of an interprofessional care team inclusive of perinatal and addictions experts for prenatal through postpartum individuals who use substances as best practice [5, 14, 15, 16, 17]. Bringing multiple providers together has been recognized to increase engagement and actionable care services, improve communication among providers, and decrease traumatization or stigmatization.

Substance use during pregnancy does not exist in isolation and is often accompanied by adverse circumstances; these may include medical conditions like HIV, hepatitis, liver and cardiac diseases, poverty, gender violence, psychiatric comorbidity, polysubstance use, nutritional deficiencies, inadequate health care, and stress; therefore, programs that provide care to these multitude of needs are required [11, 18, 19]. Based on the potential complications and diverse care requirements for individuals who use substances, it is evident that throughout the

continuum of pregnancy, birth, and postpartum models require specialized care with multiple providers and programming attuned to their needs.

Programs in the United States, Canada, and Australia dedicated to perinatal individuals who use substances began emerging in large urban areas in the early 1990's as the substance cocaine was gaining popularity [1, 21, 22]. Substance use trends in North America include polysubstance, opioid, and methamphetamine use [3, 12, 15] among pregnant individuals who use substances. Prenatal care coupled with substance use treatment is the preferable approach to improve birth outcomes [14, 15, 16]. Opioid agonist treatment (OAT) programs to improve perinatal outcomes and retention of maternal guardianship for those that use opioids emerged in the early 2000's in North America [14, 15, 16]. Despite the existence of programs and OAT therapy being available barriers for accessing services still exist, these primarily include the threat of custody loss or child apprehension and stigmatization from the care provider [11, 23, 24, 25]. As a result, substance use during pregnancy is one of the most missed and undertreated diagnoses during the perinatal period of care[14, 16].

Nathoo et al. has offered best practices for programs that offer care for pregnant individuals who use substances based on a review of four exemplar Canadian programs (Maxxine Wright Place, Healthy Empowered Resilient Pregnancy Program, HerWay, and Manito Ikwe Kagiike) [26]. The best practices elements include: (1) engagement and outreach, (2) harm reduction, (3) cultural safety (4) supporting mother and child, and (5) partnerships. The opportunity to have several team members comfortable to incorporate best practices in effort to care plan and/or provide crisis management can be invaluable[17]. There is an identified need for comprehensive best practice guidelines that are solution-focused, and delineate a safe, dignified, and compassionate care approach [15].

A gap in the literature is a summation of the existing interprofessional care models along with identification of the roles and characteristics of the interprofessional care team and program outcomes in the published literature. Determining what interprofessional care models exist for perinatal individuals who use substances is key to guide the development and sustainability of programs. The purpose of the scoping review is to (1) provide a comprehensive summation of published literature reporting on interprofessional care models for pregnant through postpartum individuals who use substances, (2) identify the roles and characteristics of the interprofessional care team providers and programs that provide effective care for pregnant through postpartum individuals who use substances, and (3) identify interprofessional program team members, patient and program outcomes, care model and provider characteristics, philosophies, and goals emerging from these interprofessional care models.

Methods

We conducted a scoping review of the literature to identify care models to develop, sustain, and improve care for perinatal individuals who use substances and early-parenting families who use substances. Scoping reviews address more complex and exploratory research questions, which includes identifying key concepts and gaps in the evidence [27]. The Arksey and O'Malley (2005) 5-stage framework for conducting scoping reviews guided the research process along with the updated recommendations from Levac et al. [28]. The five steps include: 1. Develop a research question, 2. Search for relevant material, 3. Define study selection, 4. Chart the data, and 5. Collate, summarize, and report results that are organized in tables according to research questions. The primary aim of this scoping review was to produce the first synthesis of interprofessional care models for pregnant, birthing, postpartum families who use substances based on the peer reviewed literature describing the interprofessional roles,

characteristics, and patient and/or program outcomes. The scoping review protocol is registered with Open Science Framework [29].

Study Selection Criteria

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA-ScR) extension for scoping review requirements by Tricco et al. [30] was completed. The PRISMA diagram details the flow of study selection through the different phases of the scoping review (Figure 1). Screening of articles was conducted in two phases: title and abstract and then full text review. We used an iterative process to discuss and determine a consistent approach to answer the research questions [28]. We involved an interprofessional research team in the scoping review representing nursing, midwifery, and obstetrics. All review steps involved two or more reviewers.

Studies that were eligible for inclusion included English-language, peer-reviewed reports of primary research, systematic reviews, and program websites or publications from credible databases and organizations. The following data was extracted: authors; year and type of study/publication; objectives; country of origin; study population and sample size; identification of roles on the interprofessional care team; description of characteristics of health care providers and programs; and program and patient outcomes associated with the interprofessional care team caring for pregnant, birthing, and early-parenting patients who use substances. Eligible studies included those that identified the interprofessional care team that provided care throughout the continuum of pregnancy, birth, and postpartum g who used substances. Exclusion criteria were animal studies and duplicates, studies that did not have an interprofessional care team involved in the care, did not provide care prenatally through postpartum, did not discuss a care model, and studies that were limited to a pharmacological approach. We did not pre-define the types of

outcomes such as the roles on the interprofessional care team and descriptions of the provider characteristics.

Data Sources and Searches

The search strategy was designed with guidance from a professional medical librarian. The searches were then executed by the principal investigator (KG). All citations were managed in the EndNote reference management system. We conducted a systematic search for articles and reports from a wide range of electronic data bases. Backward citation chasing also occurred using Scopus and Google scholar to identify potentially relevant literature. Search terms related to these three concepts were used: *substance use, perinatal, and interprofessional care.* Each concept included both subject headings (e.g., MeSH) and keywords, and was combined with Boolean operators (AND, OR) to produce a systematic search. These included the following health-related platforms and databases: MEDLINE (OVID); CINAHL with Fulltext (EBSCO); PsycInfo (OVID); Embase (OVID); the Web of Science (Clarivate), including Social Science Citation Index, Conference Proceedings Citation Index – Social Science & Humanities; and Social Services Abstract. The search did not have any limits set. Initial searches of two databases (CINAHL and Medline) were conducted to identify other potentially relevant keywords and subject headings. Following the initial search, the database strategies were finalized, and translated to all identified resources. Additionally, the references of full text documents were reviewed to identify any additional papers.

Data Collection Procedures

Citations were saved and deduplicated in EndNote, using the Bramer method [31]. Citations were then screened using Covidence by KG and NF. All references selected for

inclusion were organized in a shared folder amongst the team (KG, NF, & KT) on Covidence. Accurate citation counts at each stage were recorded through the PRISMA flowchart– see Figure 1 [30].

Figure 1. Preferred reporting items for systematic reviews and meta-analyses (PRISMA-ScR) – Scoping Review Extension flow diagram [32].



Findings

We (KG & NF) screened 89 full text articles for our scoping review. They were primarily from North America, Europe, and Australia. They included published research, systematic reviews, best practice guidelines, commentaries, and special reports. Several of the published articles were informative for background information as they reported on the barriers to care, and

the global concern related to the rise in substance use. We followed exclusion criteria and articles that did not include interprofessional care, did not include the perinatal population, did not have a care model, and/or were limited to providing pharmacological recommendations. Key articles on the topic of substance use during the perinatal period were retained for background information.

The reviewers reached 100% agreement on the inclusion of the 11 articles for the final summary of this scoping review. Data from the articles were extracted using the Covidence extraction tool by KG and NF. The extraction data tool was modified in Covidence to follow PRISMA-ScR guidelines and collect additional data to answer the research objectives. Key findings from the 11 included articles, which answered the scoping review research questions, are summarized in Table 1. The final 11 articles were selected because they reported on the interprofessional care models, interprofessional care team, and/or care provider characteristics and program outcomes.

Article Overview

We categorized the articles by design, including qualitative (n=2), evaluation reports/program overviews (n=7), best practice guideline (n=1), and a retrospective study (n=1). The published studies were from Australia (n=1), Canada (n= 4), United States (n=5), Canada and United States (n=1), and the United Kingdom (n=1). Most (n=10) of the articles reported on patient outcomes related to their programs. These mostly included prenatal attendance, improved maternal health outcomes related to their substance use, mother-baby togetherness, and neonatal health outcomes. Table 1 provides an overview of all eleven articles selected, the program team members, a brief description of the study, study participants, and the reported program and patient outcomes.

Table 1: Interprofessional Care Delivery Programs for pregnant through postpartum individuals who use substances.

Interprofessional Program, Country, & Publication Date	Program Team members	Description of Study & Data Collection Method.	Study Participants	Program and Patient Outcome Findings
Collaborative Outreach and Adaptable Care at Hallmark Health (COACHH) program. United States 2019.[33].	Nurse practitioner, social worker, executive director, community health worker.	Qualitative. Interviews.	COACHH program team members (n=40).	• High prenatal engagement. • Initiating and maintaining opioid use disorder treatment. • Increased mother-infant togetherness (custody, bonding). • Improved life planning outcomes (secure housing).
Eight multiservice wraparound programs. Canada. 2021. [35].	Varied among sites but included: Obstetrician, midwife, nurse, nurse practitioner, social worker, addictions counsellor, family physician, psychiatry, case manager, art therapist, music therapist, dental hygienist & cultural liaison.	Mixed Methods. Survey & Interviews.	Service partners (n=60) and program staff (n=108) from 8 different programs.	• Wraparound care improved access to services, health equity, and addressed social determinants of health. • Partnerships increased providers understanding of clients' experiences, challenges, and impacts of trauma and interconnected issues related to substance use. • Increased integration of Indigenous cultural connections. • Improved mother-child connection and child welfare outcomes.
Center for Addiction and Pregnancy (CAP) co-location program.	Obstetrician, pediatrician, midwife, addictions counsellor,	Program retrospective report. Chart review.	CAP program patients (n=100).	• Increased prenatal care attendance at appointments. • Decreased preterm deliveries.

United States. 1996. [20].	lactation consultant,			• Decreased neonatal intensive care unit admissions.
TIDES collaborative care program. United States. 2021. [35].	Obstetrician, peer support, addictions counsellor, family physician, psychiatry, spiritual care.	Evaluation report. Chart review.	Patients from TIDES (n=57 pregnant).	• 73% reporting no opioid use. • 100% had full custody of their newborns.
Comprehensive care approach model. United States. 2022. [36].	Obstetrician, pediatrician, social worker, addictions counsellor, psychiatry, psychology, case manager, anesthesiology.	Best Practice Guideline. Commentary.	NA	• Integration of the interdisciplinary approach is best practice to improve maternal outcomes, patient engagement, and maternal and neonatal outcomes.
Multidisciplinary clinic offering integrated, holistic care. United Kingdom. 2003. [37].	Obstetrician, pediatrician, midwife, nurse.	Program report. Chart Review.	Patients from the integrated clinic (n=146).	• Increased prenatal attendance. • Clients reported stabilization and reduction of substance use. • Safer substance use (not sharing needles).
The Women and Newborn Drugs and Alcohol Services (WANDAS) program. 2016. Australia. [38].	Obstetrician, pediatrician, midwife, social worker, addictions counsellor, psychiatry.	Program report. Chart Review.	Patients from the WANDAS program (n=354).	• 90% attendance rate at appointments. • mean gestation of 38 weeks and mean birth weight of 3000 grams. • 2% admitted to the nursery for neonatal abstinence syndrome. • 26 babies were placed into care by Child Protection and Family Support.
Toronto Centre for Substance Use in Pregnancy (T-Cup) program. Canada. 2011. [39].	Obstetrician, pediatrician, nurse, social worker, addictions counsellor,	Retrospective Study. Chart Review.	Patients from the T-Cup program (n=121).	• High compliance rate with prenatal care attendance. • Most reported reduction in a variety of substances use

	family physician, case manager, anesthesiology.			categories. Significant differences were found among those who presented earlier in their pregnancies. • Neonatal outcomes were satisfactory and approximately 75% of newborns were discharged with their mothers.
Wraparound Programs. Canada. 2020.[5].	Varied between sites but included: Obstetrician, midwife, nurse, nurse practitioner, social worker, addictions counsellor, family physician, psychiatry, case manager, art therapist, music therapist, dental hygienist & cultural liaison.	Mixed Methods. Interview and Survey Data.	Service partners (n=60) and program staff (n=108) from 8 different programs.	• Resulted in better access for clients to health and social care, addressing trauma, and improved child welfare outcomes. • Increased access to women's mental health services, access for children's health assessments and referrals, access to cultural programming, increased prenatal support and attendance at appointments, increased connection with peers for parenting programs.
Integrated Care Models. Canada & United States. 2018. [40].	Varied between sites but included: Obstetrician, pediatrician, midwife, nurse, nurse practitioner, addictions counsellor, family physician, psychiatry, peer support, psychology,	Qualitative Phenomenological. Interviews.	Program leaders from across North America (n=23).	• Families require frequent, supportive visits. Billable services can restrain this. • Provider program champions are important but interprofessional care can still remain siloed. • Addressing dual needs (newborn and parents) can be difficult if caregivers continue substance use.

	pharmacist, case manager, patient navigator, childcare, pharmacist, occupational therapist, nutritionist, resource coordinator.			
Comprehensive Care Program. Canada. 1984. [41].	Obstetrician, pediatrician, addictions counsellor, psychology, child development educators.	Evaluation report. Chart Review.	Prenatal patients (n=219) and Pre-pregnancy obstetrical patients (n=191).	• In four-fifths of the cases there were at least 5 prenatal visits. • The dose of methadone at delivery remained stable. • 5.2% had premature rupture of membranes, and obstetrical complications were absent in nearly two thirds of the cases. • Newborn gestational age and birthweight were considerably improved over outcomes for those that receive little or no prenatal care.

Summation of Interprofessional Care Models

Patient Enrollment and Continuity of Care within Programs

We reviewed the articles for patient enrollment criteria for each program and if there were referral processes. Enrollment and referral processes are important for patient accessibility and decision makers as they plan programs and identify costs. The inclusion criteria for pregnant individuals who use substances to participate in the reported programs during the prenatal period

varied from substance abstinence [35] to program attendance that endorsed a harm reduction approach [5, 34, 37, 41]. The TIDES program had 97% of their patients enter the program voluntarily and attributed the voluntary participation to the success of the program [35]. Programs such as the Collaborative Outreach and Adaptable Care at Hallmark Health (COACHH) program identified that they continue to face challenges enrolling patients and measuring outcomes [33]. The pathway by which patients were engaged by or accepted into the other programs was not available.

Continuity of care for perinatal individuals spans the continuum of pregnancy, birth, and postpartum. We identified 6 programs that reported continuity of care across the continuum inclusive of the birth period. The Center for Addiction and Pregnancy (CAP) program provided 24-hour midwifery coverage for the birth experience [20]. Oversight of labour and delivery coverage was not detailed by the other 5 programs. The CAP program was the only program that included residential care for 5-7 days [20]. The residential care in the CAP program was followed by outpatient programming that included group education on obstetrical care, substance use, occupational therapy, family, relapse prevention, family planning, parenting, and lactation.

We determined that variances existed in length of services for postpartum care provided by the eleven programs analyzed in this scoping review. The care interval ranged from 6 weeks to 18 months postpartum. O'Connor et al. (2016) acknowledged that their team ensured patients are linked to appropriate follow up care in the community before they are discharged at 3 months postpartum [38]. The importance of a handoff to other care providers postpartum was likewise emphasized by some of the program leaders interviewed in Schiff and colleagues' (2022) qualitative research study [40].

Co-location of Services

Co-location of services is an attempt to address the barriers of access to services and promote consultation and care from different providers in one site. All eleven publications reported varying multiple services offered in the same physical space. The identified benefits of co-location of services included decreased barriers to access and care providers being able to meet and discuss care planning [20,34,41]. Study participants in the programs reviewed identified the significant benefits of having basic needs of food, clothing, housing, and care for women's health, substance use, trauma, child welfare, and/or children's health services co-located as impactful to their pregnancy and postpartum health and care experiences [5, 33,40]. Co-location of services can facilitate the wraparound approach for pregnant individuals who use substances focusing on social determinants of health, with provision of primary, prenatal, perinatal, and mental health services [5].

Most of the studies reviewed also discussed the establishment and importance of partnerships with community agencies located outside of their programs. Emphasis was placed on the importance of trusting partnerships and agreements when a recommended prenatal or postpartum service is not co-located [34, 35]. McKinney and colleagues (2022) identified the importance of the interprofessional care teams' interface and advocacy with the legal system in keeping families together [36]. Rutman and colleagues (2020) acknowledged that fewer partnerships with housing, income assistance, Indigenous cultural programming, infant development, and legal services existed among the eight Canadian multi-service programs for pregnant individuals who use substances that they reviewed in their study [5]. Legal services were not reported to be co-located in any of the eleven publications.

Care Model Approaches

Exploration of care model approaches was conducted. Many of the interprofessional care models have successfully blended social, primary care, pregnancy care, and addictions care. All eleven publications referred to the importance of collaboration among care providers, prevention of child/infant removals and incorporating trauma informed and harm reduction principles. The Women and Newborn Drugs and Alcohol Services (WANDAS) program philosophy explicitly stated that they embed trauma informed approaches in all care interactions and assessment tools [38]. The harm reduction approach in the Toronto Centre for Substance Use in Pregnancy (T-Cup) program was integrated into the program to engage and retain pregnant individuals who use substances in care [39]. A few programs in the Co-Creating Evidence study reported incorporation of cultural care including Baby Welcoming ceremonies, spending time with Elders, traditional teachings, and participating in drum programs [5]. Group and peer support was offered in several of the programs however these authors did not describe what this looked like within their program [5, 35]. Patients that experienced peer support described it as beneficial to develop friendships and be on the same road [5]. Table 2 outlines the care model approaches from each of the publications.

Table 2: Care Model Characteristics

Study	Co-location of Services	Cultural Care	Trauma Informed	Harm Reduction	Partnership with other agencies	Group/ Peer Support
Collaborative Outreach and Adaptable Care at Hallmark Health (COACHH) [33].	✓				✓	
Eight multiservice wraparound programs [34].	✓	✓	✓	✓	✓	✓
Center for Addiction and Pregnancy (CAP) [20].	✓					✓
TIDES collaborative care program. [35].	✓				✓	✓
Comprehensive care approach model. [36].			✓			
Multidisciplinary clinic. [37]	✓			✓		
The Women and Newborn Drugs and Alcohol Services (WANDAS) program [38].			✓	✓	✓	
Toronto Centre for Substance Use in Pregnancy (T-Cup) [39].	✓			✓	✓	
Eight multiservice wraparound programs. [5].	✓	✓	✓	✓	✓	✓
Integrated Care						

Models [40].						
Comprehensive Care Program [41].	✓			✓		✓

Roles and Characteristics of the Interprofessional Care Team

Interprofessional Care Team Roles

The interprofessional care teams consisted of 4 to 15 members in differing roles. The obstetrician was represented on all eleven of the interprofessional care teams in the publications reviewed. McKinney and colleagues (2022) described the obstetrician's role as the provider responsible for coordinating care and ensuring appropriate referral to other care [36]. Additional team members identified in the programs reviewed included midwifery, nurse practitioner, patient navigator, pharmacy, nutritionist, childcare providers, dental hygienist, cultural liaison, art therapist, music therapist, and spiritual care provider. The importance of multidisciplinary team meetings was emphasized by a few of the authors to enhance coordinated care [35, 36]. North American program leaders for perinatal individuals who use substances (n=23) were interviewed in Schiff et al.'s (2022) phenomenological study [40]. They reported on the great potential for further integrated care as a necessity, highlighting the requirements for changes in infrastructure, staffing, and loosening of the bonds of siloed maternal, infant, and addictions care in many settings [40]. Pregnant individuals who choose who they interact with on the interprofessional care team reported the positive impact related to patient experience and their autonomy [5, 35].

Interprofessional Care Provider Characteristics

Many of the programs in the eleven articles indicated they were built on non-judgmental care, trusting relationships, and relational care. However, these characteristics are not well described with coinciding actionable approaches. McKinney and colleagues (2022) refer to a non-stigmatizing approach being necessary to promoting better outcomes with child welfare [36]. Mitchell et al. (2003) described the non-judgemental attitude as important to give the clients increased confidence and self-esteem, allowing questions to be asked, and being inviting to make decisions [37]. Shared-decision making was central to two of the programs (COACHH & T-CUP) as clients benefit when they decide what care providers, they need to be successful in the program [33, 39]. Respect and positivity were other characteristics identified and not further described. Since it is well reported that significant barriers for pregnant individuals who use substances to engage or return for care are stigmatization, judgment, and fear the care provider characteristics identified make sense. Table 3 identifies the care characteristics of the program providers.

Table 3: Reported Care Provider Characteristics

Study	Non judgmental	Trust	Respect	Shared decision making	Relational
Collaborative Outreach and Adaptable Care at Hallmark Health (COACHH) [33].	✓	✓	✓	✓	✓
Eight multiservice wraparound programs [34].	✓	✓			✓
Center for Addiction and Pregnancy (CAP) [20].	None reported.				
TIDES collaborative care program [35].		✓			
Comprehensive care approach model [36].					✓
Multidisciplinary clinic [37].	✓				
The Women and Newborn Drugs and Alcohol Services (WANDAS) program [38].	✓	✓			
Toronto Centre for Substance Use in Pregnancy (T-Cup) [39].				✓	
Eight multiservice wraparound programs. [5].	✓	✓			✓
Integrated Care Models [40].		✓			✓
Comprehensive Care Program [41].	None reported.				

Patient and Program Outcomes

Improved Maternal and Neonatal Outcomes

Overall, the programs reported beneficial outcomes when pregnant individuals who use substances engaged in specialized care with an interprofessional care team. Major findings included increased prenatal engagement, decreased substance use, and increased mother-baby togetherness/custody (see Table 1). Qualitative data from Mitchell and colleagues' study (2003)

reported on patients signals of change such as decreasing substance use and safer substance use. Patients of the *TIDES* program and *T-CUP* program self-reported on abstinent opioid use during the postpartum period of the programs [35, 39].

Many of the publications reported on the improved neonatal outcomes related to decreased preterm deliveries and decreased neonatal intensive care admissions [20, 35, 38, 39]. The success of this was correlated with care providers from their programs fostering the newborn and mother relationship and advocating to keep women and their newborns together. The TIDES program emerged when North Carolina was spotlighted for opioid use and significant concerns with child placement in foster care [35]. The TIDES program was designed to avoid foster care placement and 100% of program participants (n=57) had full custody of their newborns following completion of the program. The COACHH program reported that clients in their program had positive interactions with the Department of Children and Families and secure housing [33]. There is a lack of long term outcomes for patients reported in the reviewed literature.

Discussion

Given the rise of substance use throughout the perinatal care continuum there is a need to have specialized programs staffed with interprofessional care providers. The importance of multi-sector, multi-service wraparound programming and partnership approach is evident amongst the literature reviewed. When there is a wide range of services provided and pregnant individuals who use substances can choose what services and care providers they interact with, a person and women centered approach is honored [5]. Studies reviewed in this scoping review were inclusive of an obstetrician, however, many settings may not have obstetrical resources. Perinatal expertise can be provided by other primary care providers such as midwifery and

family practice physicians. The existing programs highlight positive maternal and neonatal outcomes promoting the need for them to scale and spread across the health care systems. When these services are offered and co-located, this resulted in pregnant individuals who use substances having increased engagement with the health care system.

Despite the number of growing programs and interest in program development for perinatal individuals who use substances attention to a streamlined referral process into programs is required. Overcoming complex health care systems and limiters such as abstinence to promote successful referral and engagement must be addressed [36]. Partnership between care providers and agencies to promote care engagement is essential to prevent missed care opportunities that improve maternal and newborn outcomes [26, 36]; the interprofessional care programs reviewed highlighted the increased engagement during the prenatal period. With a commitment to meeting the needs of pregnant through postpartum individuals who use substances, program leaders need to evaluate what services should be offered, how to foster relationships among the care team and with external community partners. Decision about who will be employed on the interprofessional care team also needs to be considered. Resource constraints along with the high demand for substance use programs and detoxification programs are likely a reality in many settings throughout the world. Given the current context and strains in many healthcare systems utilizing existing care models and evidence-based approaches rather than creating new ones is sensible.

Policy and program planners need to advocate for resources and share the positive impacts for the pregnant person, family, and community when an interprofessional care approach is integrated into the health care system. The discourse to obtaining non-judgmental care among pregnant individuals who use substances is challenging. Persons are often framed with the double stigma of being a substance user or “addict”, along with the perception as a parent-to-be

lacking maternal commitment in the eyes of society [44]. Advocacy is required to reconsider that narrative, as substance use (or lack thereof) does not define parental capacity. Care providers working with pregnant individuals who use substances are in a precarious position as they navigate the patient-provider confidential relationship with the role of mandatory reporting for child abuse and neglect. Patients may perceive a dual loyalty; providers scope should be transparent with the patient before and after communication with child welfare [17]. Stigma associated with substance use or "addiction stigma" is thought to exacerbate the structural and individual level barriers to treatment and care [45]. Intersectional stigma exists among pregnant individuals who use substances; the stigma is a result of the dynamic interaction of multiple marginalized social identities [46]. Therefore, incorporating the components of trauma informed care and harm reduction are vital in facilitating safe access [4, 17]. When organizations do not enact policies to provide nonjudgmental, trauma informed, and culturally grounded approaches, the result can lead to decreased prenatal care [5]. Cultural care inclusive of individuals perspectives align with a wraparound approach by viewing cultural engagement as healing [42, 43]. When someone has experienced stigma and a negative health care interaction, they are less likely to engage in care, for any reason again [46]. The consequences of shame-based barriers such as stigmatization can be grave for both the parent and newborn. The programs that identified the importance of a nonjudgmental approach did not provide a nuanced approach to enact being nonjudgmental.

Persons who care for pregnant individuals who use substances had a philosophy of care that demonstrated commitment to the population. Based on the literature reviewed, there is limited description of how patients perceive care provider characteristics in the health care setting. Further exploring approaches taken by the care providers that are nonjudgmental,

trusting, relational, respectful, and positive could provide insight into provider training. Few care providers have reported that they received specialized or adequate education and training in substance use [14]. Training for healthcare professionals is still in the early adoption stages when it comes to care for persons with substance use disorders [36]. The programs analyzed here did not discuss the education and training that their interprofessional care team possessed to work in the programs. Nathoo et al. (2013) acknowledges that many Canadian programs have taken their own initiative to provide training for health professionals on substance use and pregnancy [26]. Some Canadian programs have drawn from practice-based research conducted with First Nations women and treatment providers in addiction treatment programs [47].

Gaps in the Literature

Research in this area is already limited by under-reporting likely related to the stigmas related to substance use during pregnancy and inconsistent screening . Quantifying outcomes directly related to the programs for substance use among pregnant persons has been a challenge [33, 39]. This scoping review was limited to programs that were published in the literature for this population. Many of the publications reported on the perspectives of program employees [40] and a volunteer sampling approach was taken with patients [5, 34]. Studies have yet to identify the relative contribution of program components (care provider make up) and provider characteristics that contribute to positive perinatal outcomes.

Much of the published literature provides overviews of the programs without statistically significant or comparative evidence. Marcellus et al. (2015) has highlighted the need for evaluation indicators to move away from using abstinence as a measure of success [48]. Ordean and Kahan's (2011) retrospective study identified that there are many confounding factors in their data analysis including baseline severity of addiction and level of functioning [39]. Finding

the right quantitative outcome measurements is noted as difficult; instead, success has been measured in qualitative terms for many programs.

Qualitative interviewing with program providers and participants is a guided approach to facilitate sharing of experiences and perspectives. It is possible that participants will not have shared all aspects and perspectives related to their experiences. The existing literature and the publication reviewed in the scoping review highlighted the importance of care provider characteristics as non-judgmental, trusting, and relational from the provider perspective. However, a significant gap in the literature is the patients' perspectives on what provider characteristics are important and what they look like in practice. The nuances of these relationships remain unknown. Patient perspectives and patient engaged research are key to the success of programs. Thus, patient perspectives need to be further explored by researchers.

Conclusion

We explored the existing interprofessional care models that have published and affirmed that the interprofessional care approach is best practice for pregnant individuals who use substances. We found that encounters between pregnant individuals who use substances and a dedicated interprofessional care team have positive outcomes. Further deploying the already successful strategies that are included in many of programs is a logical first step as the health care system evolves to provide further programming and care for pregnant individuals who use substances. Wraparound programming has been remarkable in providing blended social and primary care services for pregnant individuals who use substances [5]. A trauma-informed, culturally sensitive, and harm reduction approach influences retention in the programs.

Decreasing stigmatization as a barrier to care matters; every encounter between a health care provider and person who is substance involved during the prenatal through the early-parenting periods is an opportunity to build a trusting relationship. An environment where the interprofessional care team can effectively collaborate with external community partners is important to increase the mother and newborn togetherness and to reduce unnecessary costs, trauma, and involvement of the legal system. Fostering ways for trusting partnerships during the transitions between and within settings is key to promoting pregnant individuals who use substances satisfaction with the health care system. The interprofessional care team providers and those that provide peer support within the programs have the unique opportunity to contribute to improved social, maternal, and neonatal outcomes for perinatal individuals who use substances. Perhaps most importantly, the patients themselves have an important leadership role to play in defining the care goals of these endeavours, particularly when they are engaged as experts early in program conception.

References

1. Pierce SL, Zantow EW, Phillips SD, Williams M. Methamphetamine-associated cardiomyopathy in pregnancy: A case series. *Mayo Clin Proc*. 2019;94(3):551–4. DOI: http://dx.doi.org/10.1016/j.mayocp.2018.12.008

2. Whittaker A. Guidelines for the Identification and Management of Substance Use and Substance Use Disorders in Pregnancy By World Health Organization Geneva, Switzerland: *WHO Press*, 2014ISBN: 9789241548731, 224 pp. http://www.who.int/substance_abu: Critiques. *Drug Alcohol Rev*. 2015;34(3):340–1. DOI: http://dx.doi.org/10.1111/dar.12212

3. World Health Organization. Opioid overdose. *WHO Press, 2023. https://www.who.int/news-room/fact-sheets/detail/opioid-overdose.*

4. Seng J, Taylor J. Trauma informed care in the perinatal period. *Dunedin Academic Press*; 2015.

5. Rutman D, Hubberstey C, Poole N, Schmidt RA, Van Bibber M. Multi-service prevention programs for pregnant and parenting women with substance use and multiple vulnerabilities: Program structure and clients' perspectives on wraparound programming. *BMC Pregnancy Childbirth*. 2020;20(1):441. DOI: http://dx.doi.org/10.1186/s12884-020-03109-1

6. Scaria MK. Role of care pathways in interprofessional teamwork. *Nurs Stand*. 2016;30(52):42–7. DOI: http://dx.doi.org/10.7748/ns.2016.e10402

7. Morgan S, Pullon S, McKinlay E. Observation of interprofessional collaborative practice in primary care teams: An integrative literature review. *Int J Nurs Stud* . 2015;52(7):1217–30. DOI: http://dx.doi.org/10.1016/j.ijnurstu.2015.03.008

8. Ordean A, Wong S, Graves L. No. 349-substance use in pregnancy. *J Obstet Gynaecol Can*. 2017;39(10):922-937.e2. DOI: http://dx.doi.org/10.1016/j.jogc.2017.04.028

9. Morton J, Konrad SC. Introducing a caring/relational framework for building relationships with addicted mothers. *J Obstet Gynecol Neonatal Nurs*. 2009;38(2):206–13. DOI: http://dx.doi.org/10.1111/j.1552-6909.2009.01006.x

10. Wright TE, Schuetter R, Fombonne E, Stephenson J, Haning WF III. Implementation and evaluation of a harm-reduction model for clinical care of substance using pregnant women. *Harm Reduct J*. 2012;9(1). DOI: http://dx.doi.org/10.1186/1477-7517-9-5

11. McLafferty LP, Becker M, Dresner N, Meltzer-Brody S, Gopalan P, Glance J, et al. Guidelines for the management of pregnant women with substance use disorders. *Psychosomatics*. 2016;57(2):115–30. DOI: http://dx.doi.org/10.1016/j.psym.2015.12.001

12. Heaman MI, Martens PJ, Brownell MD, Chartier MJ, Thiessen KR, Derksen SA, et al. Inequities in utilization of prenatal care: a population-based study in the Canadian province of Manitoba. *BMC Pregnancy Childbirth*. 2018;18(1):430. DOI: http://dx.doi.org/10.1186/s12884-018-2061-1

13. Joudrey PJ, Bart G, Brooner RK, Brown L, Dickson-Gomez J, Gordon A, et al. Research priorities for expanding access to methadone treatment for opioid use disorder in the United States: A National Institute on Drug Abuse Center for Clinical Trials Network Task Force report. *Subst Abus*. 2021;42(3):245–54. DOI: http://dx.doi.org/10.1080/08897077.2021.1975344

14. Ecker J, Abuhamad A, Hill W, Bailit J, Bateman BT, Berghella V, et al. Substance use disorders in pregnancy: clinical, ethical, and research imperatives of the opioid epidemic: a report of a joint workshop of the Society for Maternal-Fetal Medicine, American College of Obstetricians and Gynecologists, and American Society of Addiction Medicine. *Am J Obstet Gynecol*. 2019;221(1):B5–28. DOI: http://dx.doi.org/10.1016/j.ajog.2019.03.022

15. Gulbransen K, Thiessen K, Pidutti J, Watson H, Winkler J. Scoping review of best practice guidelines for care in the labor and birth setting of pregnant women who use methamphetamines. *J Obstet Gynecol Neonatal Nurs.* 2022;51(2):141–52. DOI: https://www.semanticscholar.org/paper/72464a8ff81f776099b534d2ad247f5dd6a38380

16. Krans EE, Campopiano M, Cleveland LM, Goodman D, Kilday D, Kendig S, et al. National Partnership for Maternal Safety: Consensus Bundle on Obstetric Care for women with Opioid Use Disorder: Consensus bundle on obstetric care for women with opioid use disorder. *Obstet Gynecol*. 2019;134(2):365–75. DOI: http://dx.doi.org/10.1097/AOG.0000000000003381

17. Raffi ER, Gray J, Conteh N, Kane M, Cohen LS, Schiff DM. Low barrier perinatal psychiatric care for patients with substance use disorder: meeting patients across the perinatal continuum where they are. *Int Rev Psychiatry*. 2021;33(6):543–52. DOI: https://pubmed.ncbi.nlm.nih.gov/34406106/

18. Perez FA, Blythe S, Wouldes T, McNamara K, Black KI, Oei JL. Prenatal methamphetamine-impact on the mother and child-a review. *Addiction*. 2022;117(1):250–60. DOI: http://dx.doi.org/10.1111/add.15509

19. New South Walesw ministry of health . Clinical guidelines for the management of substance use during pregnancy, birth, and the postnatal period. *NSW Ministry of Health.* 2014; 1-148. DOI: https://www.health.nsw.gov.au/aod/professionals/Publications/substance-use-during-pregnancy-guidelines.pdf

20. Jansson LM, Svikis D, Lee J, Paluzzi P, Rutigliano P, Hackerman F. Pregnancy, and

addiction. A comprehensive care model. *J Subst Abuse Treat*. 1996;13(4):321–9. DOI: https://pubmed.ncbi.nlm.nih.gov/9076650/

21. Government of Canada. Canadian tobacco, alcohol, and drugs survey (CTADS): summary of results for 2017. *Gov of Canada. 2023.* . DOI: https://www.canada.ca/en/health-canada/services/canadian-alcohol-drugs-survey/2017-summary.html

22. Kalaitzopoulos D-R, Chatzistergiou K, Amylidi A-L, Kokkinidis DG, Goulis DG. Effect of methamphetamine hydrochloride on pregnancy outcome: A systematic review and meta-analysis: A systematic review and meta-analysis. *J Addict Med*. 2018;12(3):220–6. DOI: https://pubmed.ncbi.nlm.nih.gov/29509557/

23. Holt K, French G. Exploring the motherhood experiences of active methamphetamine users. *Crime Law Soc Change*. 2020;73(3):297–314. DOI: http://dx.doi.org/10.1007/s10611-019-09862-5

24. Mahoney K, Reich W, Urbanek S. Substance use disorder: Prenatal, intrapartum, and postpartum care. *MCN Am J Matern Child Nurs*. 2019;44(5):284–8. DOI: https://pubmed.ncbi.nlm.nih.gov/31415268/

25. Weber A, Miskle B, Lynch A, Arndt S, Acion L. Substance use in pregnancy: Identifying stigma and improving care. *Subst Abuse Rehabil*. 2021;12:105–21. DOI:

https://www.semanticscholar.org/paper/8c738d65043427249226b009ad52cc1a6dc902ea

26. Nathoo T, Poole N, Bryans M, Dechief L, Hardeman S, Marcellus L, et al. Voices from the community: Developing effective community programs to support pregnant and early parenting women who use alcohol and other substances. *First Peoples Child Fam Rev*. 2013;8(1):93. DOI: https://www.semanticscholar.org/paper/a5f39793525b6e4971e8dfaf98affd1a7b47a70e

27. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol*. 2005;8(1):19–32. DOI: https://www.semanticscholar.org/paper/f12499d98165f62f07f928f913bc184a1be6045c

28. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci*. 2010;5(1):69. DOI: https://pubmed.ncbi.nlm.nih.gov/20854677/

29. Gulbransen K, Thiessen K. Interprofessional care models for pregnant and early-parenting persons who use substances . *Open Science Framework*; 2023. DOI: http://dx.doi.org/10.17605/OSF.IO/HNVA7

30. Tricco AC, Lillie E, Zarin W, O'Brien K, Colquhoun H, Kastner M, et al. A scoping review on the conduct and reporting of scoping reviews. *BMC Med Res Methodol*. 2016;16(1):15. DOI: https://pubmed.ncbi.nlm.nih.gov/26857112/

31. Bramer WM, Giustini D, de Jonge GB, Holland L, Bekhuis T. De-duplication of database

search results for systematic reviews in EndNote. *J Med Libr Assoc* . 2016;104(3):240–3. DOI: https://pubmed.ncbi.nlm.nih.gov/27366130/

32. PRISMA . Prisma-statement.org. DOI: https://prisma-statement.org/Extensions/ScopingReviews?AspxAutoDetectCookieSupport=1

33. Hodgins FE, Lang, JM, Malseptic GG, Melby LH, Connoly KA. Coordinating outpatient care for pregnant and postpartum women with opioid use disorder: Implications for the COACHH program. Matern Child Health J. 2019 May;23(5):585-591. doi: 10.1007/s10995-018-2683-y. PMID: 30604105.

34. Rutman D, Hubberstey C. National evaluation of Canadian multi-service FASD prevention programs: Interim findings from the Co-Creating Evidence study. *Int J Environ Res Public Health*. 2019; 6(10):1767. DOI: https://pubmed.ncbi.nlm.nih.gov/31109087/

35. Jones C, Duea S, Griggs K, Johnstone W Jr, Kinsey D. Improving outcomes of mothers with Opioid Use Disorder using a community collaborative model. *J Prim Care Community Health*. 2021;12:21501327211052400. DOI: http://dx.doi.org/10.1177/21501327211052401

36. Mckinney JR, Russell M, Avellaneda-Ojeda A, Gannon C, Zambare S, Hansford M, et al. A comprehensive care approach for pregnant persons with substance use disorders. *Int J*

Ment Health Addict. 2022; DOI: http://dx.doi.org/10.1007/s11469-022-00760-x

37. Mitchell E, Hall J, Campbell D, van Teijlingen E. Specialist care for drug using pregnant women. *Br J Midwifery*. 2003;11(1):7–11. DOI: http://dx.doi.org/10.12968/bjom.2003.11.1.11017

38. O'Connor A, McLaurin R. Comprehensive care for women with alcohol and other drug use: The women and newborn drug and alcohol service, Perth. *Australian Midwifery News* . 2016;16(3):20–1. DOI: https://search.informit.org/doi/abs/10.3316/informit.366788483443264

39. Ordean A, Kahan M. Comprehensive treatment program for pregnant substance users in a family medicine clinic. *Can Fam Physician*. 2011;57(11):e430-5. DOI: http://www.cfp.ca/content/57/11/e430.abstract

40. Schiff DM, Nielsen T, Terplan M, Hood M, Bernson D, Diop H, et al. Fatal and nonfatal overdose among pregnant and postpartum women in Massachusetts. *Obstet Gynecol*. 2018;132(2):466–74. DOI: https://pubmed.ncbi.nlm.nih.gov/29995730/

41. Suffet F, Brotman R. A comprehensive care program for pregnant addicts: obstetrical, neonatal, and child development outcomes. *Int J Addict*. 1984;19(2):199–219. DOI: https://www.semanticscholar.org/paper/c279d17e8c9111fc43bd8c367e972169c5fff556

42. Henry R, Lavallee A, Van Styvendale N, Innes R. Global Indigenous Health: Reconciling the Past, Engaging the Present, Animating the Future. 2018; DOI: https://www.semanticscholar.org/paper/45f642bd0a18282d37b559f86cc3fd22d056738a

43. Rowan M, Poole N, Shea B, Gone JP, Mykota D, Farag M, et al. Cultural interventions to treat addictions in Indigenous populations: findings from a scoping study. *Subst Abuse Treat Prev Policy*. 2014;9(1):34. DOI: https://pubmed.ncbi.nlm.nih.gov/25179797/

44. Hatzenbuehler ML, Jun H-J, Corliss HL, Bryn Austin S. Structural stigma, and sexual orientation disparities in adolescent drug use. *Addict Behav*. 2015;46:14–8. DOI: https://pubmed.ncbi.nlm.nih.gov/25753931/

45. Chambers BD, Erausquin JT. Race, sex, and discrimination in school settings: A multilevel analysis of associations with delinquency: Race, sex, and discrimination in school settings: A multilevel analysis of associations with delinquency. *J Sch Health*. 2018;88(2):159–66. DOI: https://www.semanticscholar.org/paper/6f78301d5d2d3ae0b0189d07de3d9a741e7d5033

46. Government of Canada. Strengthening Canada's Approach to Substance Use Issues. 2018. DOI: https://www.canada.ca/en/health-canada/services/substance-use/canadian-drugs-substances-strategy/strengthening-canada-approach-substance-use-issue.html

47. Acoose S, Blunderfield D, Dell CA, Desjarlais V. Beginning with our voices: How the experiential stories of First Nations women contribute to a national research project. *J Aborig Health*. 2009; 4(2):35–43. DOI: https://pubmed.ncbi.nlm.nih.gov/24795760/

48. Marcellus L, MacKinnon K, Benoit C, Phillips R, Stengel C. Reenvisioning success for programs supporting pregnant women with problematic substance use. *Qual Health Res.* 2015;25(4):500–12. DOI: https://www.semanticscholar.org/paper/6a193dbed515a85b55b333818e42e18e395fb417

Chapter 3: Appreciative Inquiry as Research Method

Preamble

Chapter 3 presents an overview and critical examination of using appreciative inquiry as a research method. Appreciative inquiry as a research method was selected as it was appropriate to answer the research questions and was able to incorporate principles of trauma informed and culturally safe approaches.

Author Contributions

The paper: Appreciative Inquiry as Research Method to Center and Amplify Patient Voices has been submitted for publication. As the PhD student, I was the principal investigator for the exploratory qualitative study: A novel care model Maternity experiences of pregnant individuals who use substances. We employed appreciative inquiry as research method. I was trained as an appreciative inquiry facilitator prior to the commencement of the research study. I consulted with an appreciative inquiry expert in the field, Grandmother Shingoose, and my entire thesis research committee to discuss the use of appreciative inquiry as method. We reviewed the five steps of the appreciative inquiry process and semi-structured interview questions at the outset to ensure they all aligned with appreciative inquiry. All authors (K Gulbransen, Dr Thiessen, Dr Phillips-Beck, Gramma Shingoose, Dr Gregory, Dr Watson, and Dr Mignone) provided critical feedback to the article.

Ethics approval was granted from Health Research Ethics Board, Shared Health Authority, and First Nations of Manitoba Social Secretariat.

Appendices associated with this chapter:

Appendix D – Health Research Ethics Board, University of Manitoba approval letter

Appendix E – Shared Health ethics approval letter

Appendix F – First Nations Health Research Social Secretariat of Manitoba approval letter

Appendix G – Informed Consent for Study Participants

Appendix H - Semi Structured Interview Guide

Copyright

The article has been submitted to a journal and is under review. The authors will only submit to a journal where we can include versions of articles in full or in part in a thesis or dissertation for non-commercial purposes.

Title: Appreciative Inquiry as Research Method to Center and Amplify Patient Voices

Authors: Gulbransen, K., Thiessen, K., (Supervisor), Phillips-Beck, W., Shingoose, L., Gregory, P., Watson, H., and Mignone, J

Statements: No conflicts of interest

Social Media statement (140 characters): Appreciative inquiry as research method with patient participants centers and amplifies their voices to improve the health care system.

Abstract

Appreciative inquiry is a process for facilitating positive change in systems by identifying existing strengths and opportunities for future improvement. This article describes the use of appreciative inquiry as a research method. Most of the existing literature about substance involved pregnancy problematizes the patient instead of delineating strengths from the person and identifying actionable strategies. The appreciative inquiry method was appropriate as the research team was able to integrate trauma informed principles and culturally safe approaches with the qualitative appreciative inquiry approach. In our study, use of appreciative inquiry saw the patient as a source of solution and strength. Indigenous health researchers have identified appreciative inquiry as a strength-based approach that aligns with a decolonized approach.

Our research team saw not only the patients' keen interest to participate in the research, but we also noted that during or following the interview experience participants were proud of their contributions to the study and system. Identification of patient, provider, and system strengths was beneficial in identifying what aspects of the care model are critical to sustain based on the patient perception. Actionable suggestions from the participants were shared in a timely way with the interprofessional care team, which allowed them to put into action the feedback received from participants. Health care organizations are under pressure to improve the

efficiency, quality, and safety for all involved in the system; appreciative inquiry can be used to meet these goals.

Introduction

The World Health Organization's vision for maternal and newborn health highlights the importance of quality care encounters built on respect, dignity, communication, and emotional support (Tuncalp et al., 2015). Persons who are pregnant and have used substances often have negative encounters with the health care system and face many barriers that impede them from accessing essential prenatal care (Renbarger et al., 2022). Preventable maternal morbidity and mortality is associated with the absence of timely access to quality care during the prenatal, birth, and postpartum period for pregnant individuals who use substances (Miller et al., 2016). To improve maternal and neonatal outcomes, it is necessary to implement evidence-based interprofessional care for pregnant individuals who use substances (Ecker et al., 2019; Gulbransen et al., 2022). Existing literature endorses interprofessional care grounded in respect, dignity, and compassion (Begley et al., 2019; Gulbransen et al., 2022; Koblinsky et al., 2016; Miller et al., 2016). However, there is a paucity of literature describing the actionable ways to improve care in these areas, especially for pregnant individuals who use substances (Gulbransen et al., 2023).

We undertook a qualitative exploratory research study using appreciative inquiry as the research method. The purpose of the study was to identify the positive experiences of pregnant individuals who use substances with an interprofessional maternity care team and opportunities to improve the model of care. Fourteen pregnant individuals who use substances were interviewed using a semi-structured interview guide with questions framed by appreciative inquiry. Our research amplifies the voice and perspectives of the pregnant individuals who use substances who have firsthand experience with an interprofessional maternity care team. The team works together in an outpatient clinic within a large, inner-city, tertiary hospital, staffed by

a midwife, obstetrician, and psychiatrist who provide continuity of care throughout the prenatal, birth, and postpartum period. The clients all give birth in the same site and the obstetrician or midwife attends their births. The purpose of this paper is to describe the use of appreciative inquiry as an appropriate research method for our study with pregnant individuals who use substances.

Overview of Appreciative Inquiry

Appreciative inquiry is a process for facilitating positive change in systems by identifying existing strengths and opportunities for future improvement. When it is employed as a research method, there is a generative process that focuses on the positive ways to explore, discover, and transform systems (Cooperrider & Whitney, 2005). Identifying strengths can provide actionable ways to promote best practice in health care systems (Merriel et al., 2022). We aimed to use a research approach that would limit unintentional retraumatization and would highlight the strengths within the patients and the existing system. To foster a research process that was safe, we also embedded a trauma informed care approach into the entire research process. As studies have shown, there is overrepresentation of trauma and violent exposures in the lives of those who use substances during pregnancy (Canonico, 2020; Ritland et al., 2021; Seng & Taylor, 2015).

More than half of the patients at the interprofessional maternity clinic have Treaty status; many others identify as Metis and about 15% self-describe as Caucasian (personal communication, Dr Heather Watson). The study took place in a Canadian city with the largest Indigenous population in Canada (McCallum & Perry, 2018). To appropriately center Indigenous ways of knowing, our research team members included an Indigenous scholar, and a traditional Knowledge Carrier and Grandmother. These experts endorsed appreciative inquiry as it aligned with anti-oppressive values. We also sought further consultation for the research process using

an appreciative inquiry approach from the First Nation Health Social Secretariat of Manitoba (FNHSSM), and the response was positive. Leeson and colleagues (2016) used appreciative inquiry and yarning as a research method and concluded that these are viable methods and alternatives to colonizing and oppressive Western modes of scholarship when engaging in research with First Peoples. Chilisa (2019) suggests that decolonizing research methods mean that the worldviews of those who have suffered a long history of oppression are given space to communicate from their frames of reference which coincides with the appreciative inquiry approach. In this era of Truth and Reconciliation it is expected that there is Indigenous representation and consultation (Smylie & Phillips-Beck, 2019).

The underlying assumption of appreciative inquiry is that all humans offer something that works right and contributes to vital, effective, and successful outcomes (Cooperrider et al., 2008; Ludema & Mohara, 2006). Key appreciative strategies include: 1) reframing problems into possibilities and threats into opportunities; 2) seeing the strengths and successes of individuals, groups, and organizations; and 3) increasing curiosity and removing judgment. These strategies are recognized to help individuals and systems shift their paradigm from a deficit-based perspective to a growth or strength-based perspective. Similar to other qualitative methods, appreciative inquiry includes the coherent logic, structure, and orientation toward the generation of practice relevant findings (Hunt, 2009).

Embedded in critical social theory, appreciative inquiry supports an open dialogue where people at the point of care are encouraged to engage in practice development to improve their setting and experiences (Trajkovski et al., 2015). This framework shifts from an older style “fix it” approach to inquiry about positive moments. Illuminating the positive moments can highlight when health care interactions between patient and provider are at their best and exemplify what

is already working (Mohr & Watkins, 2002). Having patients share their ideas on ways to provide the best possible care honors the patient at the center of the healthcare team. Patients can share their experiences as appreciative inquiry is located within the existing knowledge of what is already known from the perspective of the patient.

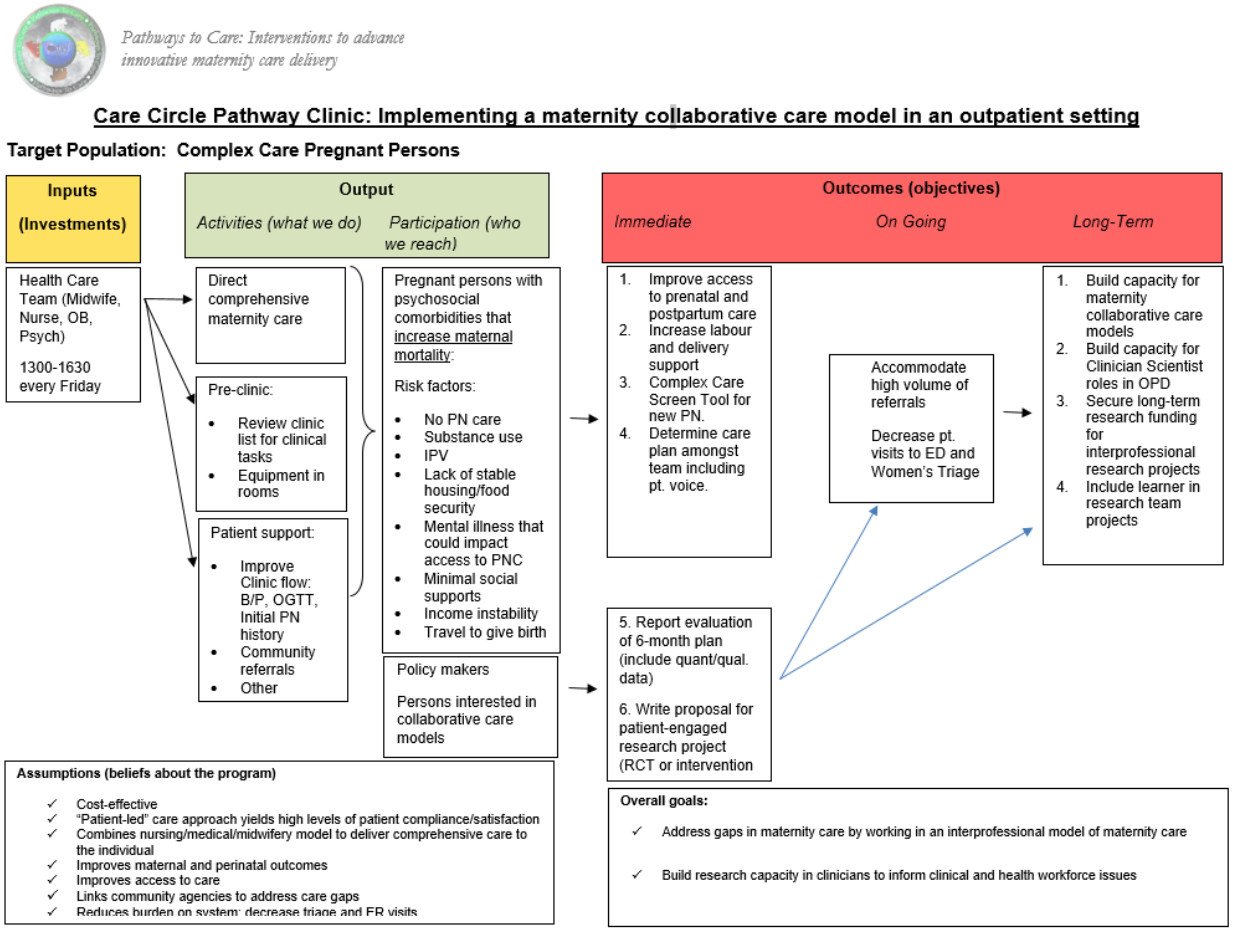
Few studies examining ways to improve health care have applied appreciative inquiry as a research method. Hayward et al. (2020) acknowledged the dearth of decolonized, strength-based research in their scoping review. Mdoe and colleagues (2021) used appreciative inquiry and explored ways to improve respectful maternity care in Malawi and Tanzania. They were able to capture positive thinking and celebrate existing good practices to sustain the programs and drive organizational change. Another study developing community healthcare outcomes used appreciative inquiry to successfully identify the existing strengths of health care workers' capacity to address human immunodeficiency virus and tuberculosis (Ghosh et al., 2022). Merriel et al.'s (2021) systematic review on the impact of appreciative inquiry claimed that appreciative inquiry as a research method can yield results that improve the quality and safety of healthcare. They included 33 studies that reported use of appreciative inquiry with findings related to improved patient outcomes, care provider attitudes, knowledge/skills, and organizational structure. These are examples of studies that led to the implementation of best practices to improve quality of care within an existing system.

Appreciative Inquiry as Research Method

Our study used appreciative inquiry as a research method to elicit pregnant individuals who use substances' perspectives of an interprofessional care model. We are unaware of other research that has used this approach to examine the care approaches for pregnant individuals who use substances. Illuminating strengths of the care providers and system made this a unique study

as most research that has been published is focused on the barriers and deficits. The appreciative inquiry approach is purposeful (Cooperrider & Whitney, 2005) and we aimed to identify solutions from the patient's perspective as the patient is the key stakeholder in our healthcare system. The purpose of the study was to explore how pregnant individuals who use substances experience the health care system with an interprofessional team during pregnancy, birth, and the first six weeks postpartum. See Figure 1 for an overview of the Interprofessional Maternity Care Model that was developed by the clinic providers.

Figure 1. Outpatient Clinic Pathway (Thiessen, 2021)



Study participants were asked to participate in a face to face or telephone semi-structured interview. The semi-structured interview questions were focused on identifying strategies from a

strength based appreciative inquiry lens to 1) reframe problems into possibilities and threats into opportunities; 2) highlight the strengths and successes of individuals, groups, and organizations; and 3) increase curiosity and remove judgment. The decision to use appreciative inquiry as a method was well supported by the research team and ethics review boards. Engaging patient participants was key to ensure that the priorities from the patient perspective were at the forefront.

The research team made the decision to apply principles of trauma informed care to all research participant interactions. Trauma informed care is endorsed for best practice in the maternity care setting (Seng & Taylor, 2015) and when collaborating with Indigenous individuals (Kennedy et al., 2022). Trauma informed care is built on providing care that is safe, respectful, dignified, and recognizes the effects of violence (Kagan et al., 2014). The trauma informed care approaches from the Crisis Prevention Institute (2022) were followed. Table 1 outlines how they were enacted in the research process. The trauma informed care approach fit well within appreciative inquiry as the questions were strength based and were written to prevent stereotyping or retraumatization.

Table 1. Trauma Informed Principles and Researcher Action

Trauma Informed Principle	**Action(s) Taken by the Research Team**
1) ensuring a safe setting	- participants had the choice to do interview face to face or over the phone. Interviews took place in a room within the clinic at the hospital. Participant seated close to the door. - coffee/tea and light snacks were provided making the interview room less like a clinical appointment and more casual. - postpartum participants brought their babies with them. - breaks were offered to every participant.
2) trustworthiness and transparency	- consent to contact was completed by participants' trusted care providers. - informed consent was obtained by the research interviewer who did not provide care at the clinic. - the purpose and appreciative inquiry style of the interview was

	introduced at the beginning of the interview.
3) support available during and following	- a list of available immediate and community supports was offered to each participant. - the interviews took place during clinic hours so participants could follow-up with their trusted care providers if needed. - Grandmother Shingoose was present for face-to-face interviews and her contact information was offered to phone participants. - the ceremony room was available (i.e., available for smudging).
4) voice and choice	- participants were encouraged to share what they were comfortable with. - participants were aware they could skip or return to any question during the semi-structured interview.
5) cultural, historical, and gender responsiveness	- presence of Knowledge Carrier and Grandmother. Offered sage for face-to-face participants. - data analysis was done in collaboration with Indigenous Scholar and Knowledge Carrier and Grandmother for historical and cultural context. - create the visual graphic design for dissemination (See Figure 1). - participants had the option to answer the question about their pronouns & gender.

All study participants consented to be interviewed using a strength based appreciative inquiry lens. There was a total of 14 participants (nine pregnant and five postpartum patients) interviewed that attended the outpatient clinic in an urban Canadian city for their prenatal, birth, and postpartum care. Participants self-identified as First Nation, Metis, or Caucasian. We recognized that there is diversity of values, language, lifestyle, and perspectives among everyone that participated in the study despite their self-categorization.

Use of the Five Stages of Appreciative Inquiry

The five processes of appreciative inquiry that were followed included: 1) Choosing the positive as inquiry (issue statement versus problem focused statement), 2) Inquiry into exceptionally positive moments during data collection, 3) Share the stories and identify life-giving forces during data collection, 4) Create shared images of a preferred future (during data collection and analysis), and 5) Innovate and improvise ways to create that future during data

collection, analysis and dissemination (Mohr & Watkins, 2002). Questions with participants during the semi-structured interviews were open-ended and strived to understand the strengths of the existing interprofessional care system. It is important to note that although appreciative inquiry focuses on positive potential, it does not negate the negative (Cooperrider & Srivista, 1987). Questions asked during the interviews also identified opportunities to improve areas that were not working well. Many participants compared their current positive experience in the interprofessional maternity clinic with past experiences with the health care system.

Choosing the Positive as Inquiry

Interview questions were developed by the principle investigator (first author) in consultation with an appreciative inquiry facilitator expert, PhD supervisor (second author), an Indigenous scholar (third author), Knowledge Carrier and Grandmother (fourth author), and the First Nation Health Social Secretariat of Manitoba committee for positive inquiry, culturally appropriateness, and content aligned to answer the research questions.

The interviewers and research team all noted that the dialogue during the interviews was mostly positive and hopeful. The focus on the positive in the questions identified strengths within the system from the patient perspective along with ideas to improve the health care system. For example, one participant had a negative experience with a routine lab draw in the lab setting. They noted that not being in a private room and being “poked" for lab work unsuccessfully several times by a “stranger” was traumatizing for someone with a substance use disorder. This led to the discussion about how to improve the laboratory investigations for clinic patients. Within a week the care providers were able to make a change for patient who found the lab environment triggering to have lab investigations done in the clinic by the interprofessional

care team midwife. The appreciative inquiry approach resulted in an actionable immediate change in clinical practice.

Framing questions in a positive way meant participants exuded more positive emotions. Many participants laughed during the interview and shed "happy tears" as they recalled the positive experiences with their care providers at the clinic. During one of the debrief sessions with Knowledge Carrier and Grandmother Shingoose, one of the participants said, "*I did a good job and it felt good*." Other comments from participants included: "*I am glad I could share my story with you*," and "*It meant a lot to be asked to be in the interview. It was the best thing for me to do today, I hope me sharing means more clinics like this open*."

Many participants offered to participate in future interviews and research opportunities. Research participants also shared that they felt "*listened*" to during the interview and were "*happy*" they participated.

Prior to the study, the care providers had observed that most of their patients experienced few missed appointments and returned for postpartum care (personal communication, Dr Kellie Thiessen). It was evident to them that there were unique contributing factors to continued engagement in care that should be identified by the patients themselves. Participants self-reported that they attended 90% of the scheduled and recommended appointments with the interprofessional maternity care team. Participants described "why" they attended the appointments and revealed it was related to the peaceful and reassuring experiences they had during their care interactions with the interprofessional care team.

Grandmother Shingoose commented that the questions made the participants feel good about themselves as they offered their ideas for their health care system. This was important as shame and stigmatization have been common emotions felt by pregnant individuals who use

substances when interacting with healthcare professionals (Holt & French, 2020). All interview questions were framed in a positive way and were open-ended to learn the stories from the participants.

Inquiry into Exceptionally Positive Moments during Data Collection

Participants shared exceptionally positive moments during the data collection. One participant referred to the care providers by stating "*they saved my life*" in reference to their attentiveness and quick response that facilitated rapid access to detox services. Another offered that "*they got me housing and out of a bad living situation and I got to keep my baby because of them*." These are among the many examples of exceptionally positive moments during data collection that participants shared. Table 2 provides a sample of identified challenges for pregnant individuals who use substances and how the questions were asked using the appreciative inquiry approach in an effort to have the strengths identified.

Table 2: Identified Barriers turned into Appreciative Inquiry Questions

Identified Barriers for Pregnant Individuals who use Substances	**Sample Question(s) to Identify the Strengths**
Lack of engagement with health care providers in the prenatal period (Renberger et al., 2022)	Tell me about a time that you have had a good or positive care experience at the clinic? Has there been anything that stands out the most for you during your prenatal care at the clinic? What influences your decision to attend a prenatal appointment?
Judgment Experienced by Patients from Providers	Have you felt respected during your prenatal care? Can you describe what it looked or felt like? What does safe care look like to you? Can you describe what it looked or felt like?

Racism Experienced by Patients from Providers	Have you felt valued (treated fairly) during your prenatal care? Can you describe what it looked or felt like? What ideas do you have to share to improve culturally safe care?
Fear of Child Apprehension	Have you felt a sense of trust with your care provider at the clinic? Can you describe what it looked or felt like? Have you felt a sense of safety with your care provider at the clinic? Can you describe what it looked or felt like?

Share the Stories and Identify Life-giving Forces during Data Collection

The appreciative inquiry process naturally led participants to identify the life-giving forces during their pregnancies, birth, and early postpartum periods. Participants described the life-giving forces that contributed to attending clinic appointments to include the "safe" care providers, their own personal contributions, their unborn fetus or newborn, and their own natural supports (i.e., family, friends). Many participants shared how these life-giving forces were contributing reasons to stay "*sober*," "*fight to get their other children back*" and maintain their opioid antagonist therapies.

Create Shared Images of a Preferred Future

Participants highlighted opportunities to improve the existing interprofessional maternity care model and go beyond the constraints of the existing health care system. The following interview questions were asked to garner patient perspectives on the preferred future: What are three wishes you would make to have the best prenatal experience? Birth experience? and postpartum experience? Participants were encouraged to answer these questions without any limits. One area that was identified as a system gap was integration of peer support and cultural

care. Although most of the participants recognized the cultural sensitivity and humility of the interprofessional care team, they suggested further co-location and integration of cultural services in the clinic setting. Several participants suggested having better signage about the ceremony room to increase awareness about its location, availability, and that smudging could take place there. Other participants suggested further integration of peer support or hosting group prenatal meetings for pregnant individuals who use substances. The participants who met with Knowledge Carrier and Grandmother Shingoose suggested that having her available on-going would also be beneficial for them to connect to their culture and learn more teachings.

Key themes related to the research questions about the strengths of the interprofessional care model and provider characteristics were also identified. Thematic analysis of the interviews revealed the following themes and subthemes as critical to caring for pregnant individuals who use substances (see Figure 1):

1) Safe Care
    - not judging,
    - reassuring,
    - peaceful relationship
    - incorporation of harm reduction.
2) Compassionate Care
    - kindness
    - listener.
3) Dignified Care
    - acceptance
    - deservingness

- shared decision making,
- honoring patients natural supports

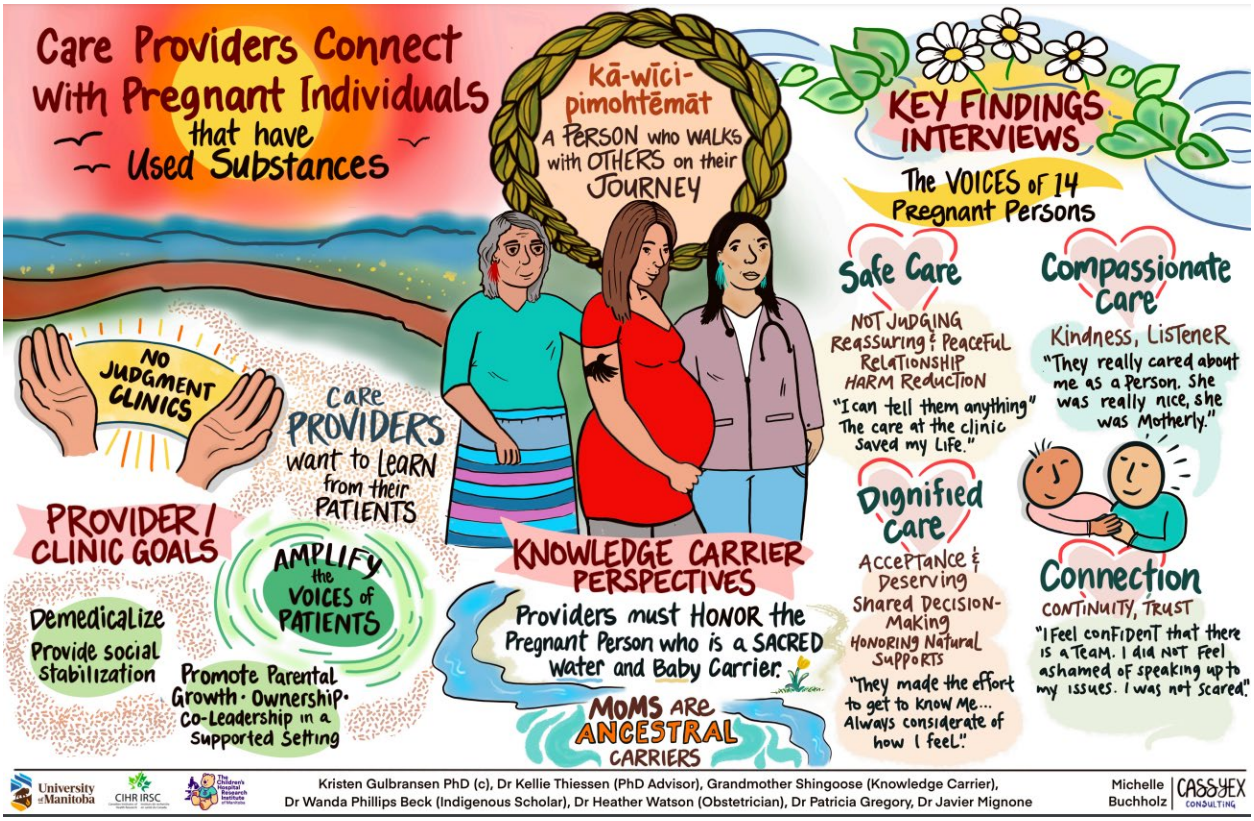
4) Connected Care

- continuity
- trust

The participants determined that these care approaches should be consistent in the prenatal, birth, and postpartum periods. The thematic analysis demonstrated that the characteristics of the interprofessional care model of this study could be reproduced and applied to other care models.

In an effort to share the findings of a preferred future, a graphic recorder was employed to create images of the findings. The process of the graphic recorder started with consultation between some members of the research team (first, second, and fourth author) and an expert in graphic recording and health policy. Following the initial consultation, a briefing note written by the principal investigator (first author), clinic care providers (second author & fifth author), and Knowledge Carrier and Grandmother Shingoose (fourth author) was completed. After three drafts of the graphic image, a final image was created by Consyx consulting. The graphic recording will be used for dissemination purposes and portions of the image will be used in the clinic to promote participants voices describing the safe, respectful, compassionate, and connected approach that they experienced in the clinic (see Figure 2).

Figure 2: Graphic Recording



Innovate to Create that Future during Data Analysis and Dissemination

Subsequent meetings between the principal investigator (first author) and interprofessional maternity care team focused on incorporating the voices of participants into tangible ideas to sustain and make improvements in the clinic. Structured questions were posed to the care providers during these meetings (see Table 3). The interprofessional care team members committed to operationalize the feedback from participants.

Table 3: Innovate Stage of Appreciative Inquiry for Care Providers

Sample Questions for Care Providers related to the Innovate Stage
• How are you going to start/sustain/improve the model of care for pregnant individuals who use substances? • What mindset do you require to make the model of care for pregnant individuals who use substances work? • Which of your strengths are you going to deploy to make this work? • If you were to change one thing, where would you begin? • What do you wish your end goal to look like? • How could you improve the results you are looking to attain? • What do you hope to achieve if there were no obstacles? • How do you want this research project to impact you in your career? • What new ideas can you put into practice to make this project work? • What do you think success in the project will mean for the team? • What changes do you see occurring as you achieve success with this project? • What overall purpose does this project serve for you, the team, and the organization? • How can you apply what you learn carrying out this project that will help you develop your strengths and skill sets? • What future is being created by being a part of this team for you?

The interprofessional care providers were responsive to the innovative questions because of their philosophy of care and practice experiences. Initial ideas to improve the interprofessional

care model included decreasing unintentional retraumatization by providing phlebotomy in the clinic, duplicating care providers to have another interprofessional midwifery-obstetrician team and pursuing a grant to hire a clinic Grandmother. Ideas for sustainability included continuing with the presence/communication during birth admission and providing ongoing education on nonjudgmental care for residents, nurses, and medical students. The providers agreed that the mindset to work in the clinic include optimism, curiosity, and accountability. There was a commitment to continue to raise awareness about the needs of their patients so the model can remain current. Other areas of improvement for the clinic included increasing prenatal mental health supports, offering opportunities for peer support, and providing even more comprehensive planning with social work. The interprofessional care team's hope is to decrease maternal mortality secondary to substance use with a safe and responsive out-patient presence.

Discussion

Appreciative inquiry captures the positive, but it is not naïve to the challenges that exist (Bushe, 2007). The premise is that positivity leads to generativity. This generative approach is based on honoring some of the old and familiar and taking it into the new (Cooperrider et al., 2008; Armstrong et al., 2020). Exploring what works well and the root causes of success is a vital component of appreciative inquiry and provides relative information for the health care system. The participants in our study identified positive contributions of the interprofessional care team and model of care. They were able to do this and more as they identified their own personal contributions and natural supports that also contributed to positive care experiences. Our use of the appreciative inquiry framework supports the findings of other authors that state that it provides a guide for both individuals and systems on how to change or disrupt negative thinking patterns into possibilities which will assist in sustaining our health care system

(Armstrong et al., 2020). Interestingly, when the ratio of positive to negative talk is 3 to 1, there are higher levels of flourishing (Fredrickson, 2013). The Broaden and Build theory reports that positive dialogue and emotions correlate with increased ability to cope with occasional diversity (Celestine, 2016). Moreover, our study showed that, when researching substance use from a strength based, trauma informed, and culturally safe way, efforts to eradicate the pervasive negativity that is often associated with the topic of substance use can occur in the prenatal through postpartum clinic setting.

Many of the participants shared stories of trauma (child apprehension from previous pregnancies) and their hopes and dreams towards gaining custody back of their older children. Their attitude of hope and intentionality was evident when they shared the actions they were taking to unite with their children. They also articulated the successes they had with a harm reduction approach in relation to addictions and/or being abstinent from substance use. The postpartum participants who were interviewed in this study all had care of their children from the most recent pregnancy. They were optimistic about their future and thankful for their care providers who called them “good moms.” Retention of custody despite a history of substance use was attributed to their current stable state. Providers offered that this was partially because of the trauma informed and harm reduction care approach at the clinic that connects patients to the resources they need to succeed as parents. Stakeholders in the health care system have the opportunity to develop and implement widespread systems change by sustaining an interprofessional model of maternity care. These findings confirm what other authors have mentioned; when the appreciative inquiry approach is effectively used, individuals can take action toward a better future (Cooperrider & Whitney, 2005), and that people are resilient and can co-create realities through questions, stories and meaning making (Armstrong et al., 2020).

Knowledge Carrier and Grandmother Shingoose observed that participants "*were confident in their sharing during the interviews; they brought up hopes and dreams to have their family unified and being interviewed empowered and inspired them even more towards their hopes and dreams*" (personal communication).

A positive sense of meaning can occur for researchers and study participants when appreciative inquiry is used in research (Grant, 2013; Rath, 2020). This was evident in the interview transcripts and memos from both the participants and care providers. This process was meaningful and empowering as life-giving forces were identified. Many of the patient participants inquired about being involved in patient research in the future and could be effective patient partners and/or co-leaders on future research projects. Next steps for research with pregnant individuals who use substances are to create further opportunities for patient partnerships. Although this was not feasible for this study, patient leadership will be a part of future study in the clinic. Evaluating the longer-term impacts when using appreciative inquiry as a method to positively impact and sustain the positives would be important. Despite being a relatively novel approach, it is well aligned with strength-based approaches that have existed for years among Indigenous populations (Kennedy et al., 2022; Leeson et al., 2016). Additionally, it is congruent with positivist constructionism methods which have also been heavily employed and critiqued in the social sciences (Merriel et al., 2022).

Conclusion

In our research study, it was meaningful that the key stakeholders were patients themselves and identified the strengths of the interprofessional maternity care model. Knowledge Carrier and Grandmother Shingoose observed that "*appreciative inquiry was a good experience as patients got to share their sacred pregnancy and birth experiences and offer their voices to*

improve the system for future mothers" (personal communication). The patient participants effectively identified the strengths of the interprofessional maternity care team that contributed to keeping them engaged in care. These included details on how the interprofessional care team provided safe, dignified, compassionate, and connected care. A paper with the findings from this study will be available from the University of Manitoba thesis repository.

Using appreciative inquiry in the study was viewed as positive by study participants and the entire research team. The research team would recommend using appreciative inquiry to gather data to sustain and improve models of care in the healthcare system. Appreciative inquiry as a research method seeks to impact existing models of care by focusing on strengths, rather than coming from a deficit lens. Indigenous health researchers have identified appreciative inquiry as a strength-based approach that aligns with a decolonized approach. Health care organizations are under pressure to improve the efficiency, quality, and safety for all involved in the system; appreciative inquiry can be used to meet these goals.

References

Armstrong, A. J., Holmes, C. M., & Henning, D. (2020). A changing world, again. How Appreciative Inquiry can guide our growth. *Social Sciences & Humanities Open*, *2*(1), 100038. https://doi.org/10.1016/j.ssaho.2020.100038

Begley, K., Daly, D., Panda, S., & Begley, C. (2019). Shared decision-making in maternity care: Acknowledging and overcoming epistemic defeaters. *Journal of Evaluation in Clinical Practice*, *25*(6), 1113–1120. https://doi.org/10.1111/jep.132432.

Bushe, G. R. (2007). Appreciative inquiry is not (just) about the positive. *Organizational Development*, *39*(4),30–35. http://www.gervasebushe.ca/AI_pos.pdf

Canonico, M. (2020, March 3). *SAMHSA's national center for trauma-informed care - trauma-informed care implementation resource center - resource*. Trauma-Informed Care Implementation Resource Center. https://www.traumainformedcare.chcs.org/resource/samhsas-national-center-for-trauma-informed-care/

Celestine, N. (2016). *Broaden-and-Build Theory of Positive Emotions*. https://positivepsychology.com/broaden-build-theory/

Chilisa, B. (2019). *Indigenous research methodologies* (2nd ed.). SAGE Publications.

Cooperrider, D. L., & Srivista, S. (1987). Appreciative inquiry in organizational life. In W. Pasmore & R. Woodman (Eds.), *Research in organization change and development* (Vol. 1, pp. 129-169). JAI Press.

Cooperrider D., & Whitney D. (2005). *Appreciative inquiry: A positive revolution in change*. Barrett-Koehler Publisher

Cooperrider D., Whitney D., & Stavros J. (2008). *The appreciative inquiry handbook: For leaders of change* (2nd ed.). Crown Custom Publishing

Crisis Prevention Institute. (2022). *Trauma informed approach at school.* https://www.crisisprevention.com/CPI/media/Media/Resource-Center/Free-Resources/PDF_TIAED.pdf

Ecker, J., Abuhamad, A., Hill, W., Bailit, J., Bateman, B. T., Berghella, V., Blake-Lamb, T., Guille, C., Landau, R., Minkoff, H., Prabhu, M., Rosenthal, E., Terplan, M., Wright, T. E., & Yonkers, K. A. (2019). Substance use disorders in pregnancy: clinical, ethical, and research imperatives of the opioid epidemic: a report of a joint workshop of the Society for Maternal-Fetal Medicine, American College of Obstetricians and Gynecologists, and American Society of Addiction Medicine. *American Journal of Obstetrics and Gynecology*, *221*(1), B5–B28. https://doi.org/10.1016/j.ajog.2019.03.022

Emmons, R.A., Froh, J., Rose, R., & Gratitude. In: Gallagher M.W., Lopez S.J. (Eds.) (2019). *Positive psychological assessment: A handbook of models and measures.* American Psychological Association; pp. 317–332.

Frankl V. E. (1984). ; 1984. Man's search for meaning: An introduction to logotherapy (3rd ed.). Simon & Schuster.

Fredrickson B. L. (2013). Updated thinking on positivity ratios. *American Psychologist*,*68*(9),814–822. doi: 10.1037/a0033584

Galea, S., Merchant, R.M., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA Internal Medicine, 180*(6)*,* 817-818. doi:10.1001/jamainternmed.2020.1562

Ghosh, S., Struminger, B. B., Singla, N., Roth, B. M., Kumar, A., Anand, S., Mtete, E., Lusekelo, J., Massawe, I., Jarpe-Ratner, E., Seweryn, S. M., Risley, K., Moonan, P. K., & Pinsker, E. (2022). Appreciative inquiry and the co-creation of an evaluation framework for Extension for Community Healthcare Outcomes (ECHO) implementation: A two-country experience. *Evaluation and Program Planning*, *92*, 102067–102067. https://doi.org/10.1016/j.evalprogplan.2022.102067

Grant, A. (2013). *Give and take: Why helping others drives our success.* Penguin Books.

Gulbransen, K., Thiessen, K., Ford, N., Beck-Phillips, W., & Watson, H (2023). *Interprofessional care models for pregnant and early parenting individuals who use substances: A scoping review.* [Unpublished manuscript]. University of Manitoba.

Gulbransen, K., Thiessen, K., Pidutti, J., Watson, H., & Winkler, J. (2022). Scoping review of best practice guidelines for care in the labor and birth setting of pregnant women who use methamphetamines. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN*, *51*(2), 141–152. https://doi.org/10.1016/j.jogn.2021.10.008

Guttmann, A., Blackburn, R., Amartey, A., Zhou, L., Wijlaars, L., Saunders, N., Harron, K., Chiu, M., & Gilbert, R. (2019). Long-term mortality in mothers of infants with neonatal abstinence syndrome: A population-based parallel-cohort study in England and Ontario, Canada. *PLoS Medicine*, *16*(11), e1002974. https://doi.org/10.1371/journal.pmed.1002974

Hayward, A., Wodtke, L., Craft, A., Robin, T., Smylie, J., McConkey, S., Nychuk, A., Healy, C., Star, L., & Cidro, J. (2021). Addressing the need for indigenous and decolonized quantitative research methods in Canada. *SSM - Population Health*, *15*(100899), 100899. https://doi.org/10.1016/j.ssmph.2021.100899

Holt, K., & French, G. (2020). Exploring the motherhood experiences of active methamphetamine users. *Crime, Law, and Social Change*, *73*(3), 297–314. https://doi.org/10.1007/s10611-019-09862-5

Jansson, L. M., Svikis, D., Lee, J., Paluzzi, P., Rutigliano, P., & Hackerman, F. (1996). Pregnancy and addiction. A comprehensive care model. *Journal of substance abuse treatment*, *13*(4), 321–329. https://doi.org/10.1016/s0740-5472(96)00070-0

Kennedy, A., Sehgal, A., Szabo, J., McGowan, K., Lindstrom, G., Roach, P., Crowshoe, L. (Lindsay), & Barnabe, C. (2022). Indigenous strengths-based approaches to healthcare and health professions education – Recognising the value of Elders' teachings. *Health Education Journal, 81*(4), 423–438. https://doi-org.uml.idm.oclc.org/10.1177/00178969221088921

Koblinsky, M., Moyer, C. A., Calvert, C., Campbell, J., Campbell, O. M. R., Feigl, A. B., Graham, W. J., Hatt, L., Hodgins, S., Matthews, Z., McDougall, L., Moran, A. C., Nandakumar, A. K., & Langer, A. (2016). Quality maternity care for every woman, everywhere: A call to action. *The Lancet,* 388(10057), 2307-2320. https://doi.org/10.1016/S0140-6736(16)31333-2

Leeson, S., Smith, C., & Rynne, J. (2016). Yarning and appreciative inquiry: The use of culturally appropriate and respectful research methods when working with Aboriginal and Torres Strait Islander women in Australian prisons. *Methodological Innovations*, *9*, 205979911663066. https://doi.org/10.1177/2059799116630660

Ludema, J., & Mohera, B. (2003). *The appreciative inquiry summit: A practitioner's guide for leading large-group change.* Berrett-Koehler Publishers.

Macpherson. A. (2015). *Introduction to appreciative inquiry.* https://www.researchgate.net/publication/276093904_Introduction_to_Appreciative_Inquiry

Martyn, J., Scott, J., van der Westhuyzen, J. H., Spanhake, D., Zanella, S., Martin, A., & Newby, R. (2019). Combining participatory action research and appreciative inquiry to design, deliver and evaluate an interdisciplinary continuing education program for a regional health workforce. *Australian Health Review, 43*(3), 345–351. https://doi.org/10.1071/AH17124

McCallum, K. E. & Perry, A. (2019). Structures of indifference: An indigenous life and death in a Canadian city: University of Manitoba press, 2018, 144 pp. *The American Review of Canadian Studies*, *49*(3), 478–480. https://doi.org/10.1080/02722011.2019.1653694

Mdoe, P., Mills, T. A., Chasweka, R., Nsemwa, L., Petross, C., Laisser, R., Chimwaza, A., & Lavender, T. (2021). Lay and healthcare providers' experiences to inform future of respectful maternal and newborn care in Tanzania and Malawi: An appreciative inquiry. *BMJ Open*, *11*(9), e046248–e046248. https://doi.org/10.1136/bmjopen-2020-046248

Merriel, A., Dembo, Z., Hussein, J., Larkin, M., Mchenga, A., Tobias, A., Lough, M., Malata, A., Makwenda, C., & Coomarasamy, A. (2021). Assessing the impact of a motivational intervention to improve the working lives of maternity healthcare workers: A quantitative and qualitative evaluation of a feasibility study in Malawi. *Pilot and Feasibility Studies*, *7*(1), 34. https://doi.org/10.1186/s40814-021-00774-7

Merriel, A., Wilson, A., Decker, E., Hussein, J., Larkin, M., Barnard, K., O'Dair, M., Costello, A., Malata, A., & Coomarasamy, A. (2022). Systematic review and narrative synthesis of

the impact of appreciative inquiry in healthcare. *BMJ Open Quality*, *11*(2), e001911. https://doi.org/10.1136/bmjoq-2022-001911

Miller, S., Abalos, E., Chamillard, M., Ciapponi, A., Colaci, D., Comandé, D., Diaz, V., Geller, S., Hanson, C., Langer, A., Manuelli, V., Millar, K., Morhason-Bello, I., Castro, C. P., Pileggi, V. N., Robinson, N., Skaer, M., Souza, J. P., Vogel, J. P., & Althabe, F. (2016). Beyond too little, too late, and too much, too soon: A pathway towards evidence-based, respectful maternity care worldwide. *Lancet (London, England)*, *388*(10056), 2176–2192. https://doi-org.uml.idm.oclc.org/10.1016/S0140-6736(16)31472-6

Rath, T. (2020). *Life's Great Question: Discover How You Contribute To The World*. Tom Rath.

Renbarger, K. M., Trainor, K. E., Place, J. M., & Broadstreet, A. (2022). Provider characteristics associated with trust when caring for women experiencing substance use disorders in the perinatal period. *Journal of Midwifery & Women's Health*, *67*(1), 75–94. https://doi.org/10.1111/jmwh.13320

Richer, R, J., & Marchionni, C. (2009). “If we can’t do more, let’s do it differently!’: using appreciative inquiry to promote innovative ideas for better health care work environments. *Journal of Nursing Management*, *17*(8), 947–955. https://doi.org/10.1111/j.1365-2834.2009.01022.x

Ritland, L., Thomas, V., Jongbloed, K., Zamar, D. S., Teegee, M. P., Christian, W.-K., Richardson, C. G., Guhn, M., Schechter, M. T., Spittal, P. M., & Cedar Project Partnership. (2021). The Cedar Project: Relationship between child apprehension and attempted suicide among young Indigenous mothers impacted by substance use in two Canadian cities. *PloS One*, *16*(6), e0252993. https://doi.org/10.1371/journal.pone.0252993

Smylie, J., & Phillips-Beck, W. (2019). Truth, respect, and recognition: addressing barriers to Indigenous maternity care. *Journal de l'Association Medicale Canadienne [Canadian Medical Association Journal]*, *191*(8), E207–E208. https://doi.org/10.1503/cmaj.190183

Seng, J., & Taylor, J. (Eds.). (2015). *Trauma informed care in the perinatal period* (1st ed.). Dunedin Academic Press.

Thiessen, K. (2021). Outpatient clinic pathway. Shared Health, Winnipeg. MB.

Trajkovski, S., Schmied, V., Vickers, M., & Jackson, D. (2015). Using appreciative inquiry to bring neonatal nurses and parents together to enhance family-centred care: A collaborative workshop: A collaborative workshop. *Journal of Child Health Care: For Professionals Working with Children in the Hospital and Community*, *19*(2), 239–253. https://doi.org/10.1177/1367493513508059

Tunçalp, Ö., Were, W. M., MacLennan, C., Oladapo, O. T., Gülmezoglu, A. M., Bahl, R., Daelmans, B., Mathai, M., Say, L., Kristensen, F., Temmerman, M., & Bustreo, F. (2015). Quality of care for pregnant women and newborns-the WHO vision. *BJOG: An International Journal of Obstetrics and Gynaecology*, *122*(8), 1045–1049. https://doi.org/10.1111/1471-0528.13451

Chapter 4: A Qualitative Exploratory Study on Interprofessional Maternity Care

Preamble

Chapter 4 presents the research findings from the qualitative exploratory research. In this study, pregnant individuals who use substances and received care from an interprofessional care clinic were recruited. The goal was to contribute lived-experience to the literature base reviewed.

The findings from this study add to the evidence regarding the importance of an interprofessional maternity care team from the patient perspective. The findings illuminate how patients perceive safe, dignified, compassionate, and connected care is in the prenatal, birth, and early postpartum period. Opportunities to improve the care model are also offered from the patient perspectives.

Author Contributions

I conceptualized and designed the study, under the supervision of Dr Thiessen (supervisor) and the entire PhD committee. As the PhD student, I was the principal investigator for the study and wrote the initial draft of this article. I also consulted with Grandmother Shingoose during data collection, data analysis, and writing of the article. All authors (K Gulbransen, Dr Thiessen, Dr Phillips-Beck, Gramma Shingoose, Dr Gregory, Dr Watson, and Dr Mignone) provided critical feedback to the article which will be submitted for publication upon completion of the thesis.

Acknowledgement: Dr Leeann Waddington - appreciative inquiry consultant

Appendices associated with this chapter:

Appendix I – Women's Ambulatory Care Clinic Screening Tool

Appendix J – Invitation to Participate in the Study

Appendix K – Consent to Contact

Appendix L – Letter of Support from Ambulatory Care Clinic Providers

Appendix M – Briefing Note for Graphic Recorder

Appendix N – Graphic Recording

Appendix O – Interprofessional Perinatal Care Clinic Values, Development & Process (Supplemental data for publication)

Title: A novel care model: Maternity care experiences of pregnant individuals who use substances

Authors: Gulbransen, K, Thiessen, K. (PhD supervisor), Watson, H., Shingoose, L., Phillips-Beck, W., Gregory, P., & Mignone, J.

Abstract

Objective: To explore how pregnant and postpartum individuals who use substances experience the healthcare system with an interprofessional maternity team. Strategies were identified from a strength based appreciative inquiry lens to improve safe, dignified, and compassionate maternity care for individuals during the prenatal, intrapartum, and early postpartum period.

Design: Exploratory qualitative appreciative inquiry.

Setting: Maternity Ambulatory Care Clinic within a large urban university affiliated tertiary care hospital.

Participants: The participants included nine postpartum and five prenatal individuals with substance involved pregnancies who engaged in care with an interprofessional maternity care team. Substance use included opioids (codeine, fentanyl, morphine, heroin), marijuana, and methamphetamine.

Methods: Semi-structured interview guide. Interviews were conducted face to face and on the phone.

Results: Fourteen participants who had used substances during their pregnancy discussed the nuances of an interprofessional maternity care model during prenatal, birth, and postpartum care experiences. The interprofessional maternity care team in the clinic includes a midwife, obstetrician, and psychiatrist. Participants described safe care as nonjudgmental, reassuring, peaceful, and inclusive of harm reduction approaches; compassionate care as kindness and

listening; and dignified care as encompassing acceptance and deserving care along with honoring natural supports. Connection was identified as a necessity and described as a trustful relationship with continuity of care between the patient and providers.

Conclusion: Our findings captured the strengths of an interprofessional maternity care team during their patient experiences. The participants identified the importance of actionable, safe, compassionate, dignified, and connected ways to interact with patients who have used substances.

Callouts

#1 Knowledge Carrier and Grandmother Shingoose shared her observations and stated, "*Moms knew they had to take care of themselves and their babies, they acknowledged that their substance use was a result of intergenerational trauma and/or addictions that started before they were pregnant"*(personal communication, May 2, 2023).

#2 "*Not being judged means patients come in ready to be judged. Judging equates to the word abuse."*

#3 The patient participants identified that connection between provider and patient is based on continuity and trust.

Introduction

Substance use during pregnancy is a major global concern (Perez et al., 2022; World Health Organization [WHO], 2014). The Centers for Disease Control and Prevention (2021) reported that substance overdose was the leading cause of pregnancy-related deaths in the United States, with opioids being the most common substance. According to the Center for Behavioral Health Statistics and Quality in the United States (2020), approximately 5.4% of pregnant women in the United States reported using illicit substances during pregnancy. Over the past decade, the number of individuals who use substances during pregnancy and seek treatment for substance use disorders has increased dramatically (Ecker at al., 2019; Guttmann et al., 2019; Rutman et al., 2020). Over 90% of substance-using adults delay or do not receive treatment for their substance use disorders, and slightly less than half of pregnant substance users receive medication-assisted treatment (Forray, 2016; Prince et al, 2022). Substance use during pregnancy is one of the most missed and undertreated diagnoses in pregnant individuals (Ecker et al., 2019; Krans et al., 2019).

Substance use in pregnancy is correlated with high-risk environments characterized by poverty, unstable housing, food insecurity, unemployment, and is often linked to histories of abuse and poor psychological health (Rivera et al., 2015; Shahram et al., 2017). While substance use can affect all, those that use substances during pregnancy are overrepresented among those with a history of traumatic relationship discord, social deprivation, and marginalization (Bushnik et al., 2017; Ordean & Kahan, 2011; Shahram et al., 2017). A qualitative study that included 17 young Indigenous women from Canada showed that the following social determinants of health intersected and influenced their substance use: traumatic life histories; socioeconomic status; culture, identity, and spirituality; shame and guilt; mental wellness; family connections; romantic

and platonic relationships; strength and hope; and mothering (Shahram et al, 2017). As a result of colonization in Canada many Indigenous women in Canada live in environments with a high rate of loss, unemployment, and violent exposures and are subsequently at higher risk for substance use (Byrne et al., 2003; Gilchrist et al., 2019; Haskell & Randall, 2009). Many Indigenous communities are concerned with substance use and are eager to advance effective approaches that are not colonizing, stigmatizing, or follow a deficit narrative (Denison et al., 2014; Wendt et al., 2019). Indigenous patients need culturally relevant pregnant care and further considerations need to be made for those that are displaced from the reserve to the city to give birth (Allen et al., 2022).

Addiction and substance use, including exposure to opioids, can be harmful to pregnant individuals and newborns. Maternal outcomes related to substance use may include cardiomyopathy (Pierce et al., 2019), transmission of viral infections, psychotic episodes, overdose, and death from cardiorespiratory complications (Government of Canada, 2023). Longer term societal consequences can include spread of infectious disease, interpersonal violence, toxic stress, and future unintended pregnancies (Seng & Taylor, 2015; Sharham et al., 2017). Kalaitzopoulos and colleagues' (2018) systemic review and meta-analysis suggests that intrauterine exposure of the substance methamphetamine is linked to the deterioration of neonatal somatometric characteristics (birth weight, head circumference and body length) and lower APGAR scores. There are greater number of neonatal intensive care unit (NICU) admissions among newborns who have been exposed to substances due to prematurity and prenatal substance exposure (Perez et al., 2022). Admission to the NICU for neonatal abstinence syndrome can be associated with multiple complications, including the separation of the mother-infant dyad (Dumas et al., 2013). The financial cost of neonatal abstinence syndrome per infant

in the hospital is reported to range from $30 000 to $120 000 (Strahan et al., 2020). If a child is apprehended out of their parent‘s care, the subsequent societal cost averages $46 800 per child each year (Legislative Review Manitoba, 2018). Guttmann and colleagues (2019) reported that approximately 1 in 20 mothers of infants with neonatal abstinence syndrome died within 10 years of delivery in both England and Canada—a mortality risk 11–12 times higher than for control mothers. Beyond monetary costs, there are immeasurable costs to the mother as a person, including increased risk of suicide, overdose, and long-term mental health impacts (Ritland et al., 2021).

Care considerations that are trauma-informed, safe (inclusive of cultural safety), compassionate, and dignified are all critical when providing care to individuals who are pregnant and have used substances (Government of Canada, 2018; Gulbransen et al., 2022). Treatment can be complex and best practice suggests a coordinated interdisciplinary approach (Ecker et al., 2019; Gulbransen et al., 2022). Many care providers, community programmers, funding agencies, and policy developers are also asking questions and conducting research to develop and renew care services to best support pregnant individuals who have used substances (Graves et al., 2021; Rutman et al., 2020). There is a paucity of evidence and lack of emphasis on identifying and addressing the complexity of disparities-such as those caused by racism, poverty, stigma, and education-that inform trajectories of addiction and prevent exposed pregnant individuals from receiving necessary healthcare (Denison et al., 2014; Hayward et al., 2020).

Patient perspectives rarely inform providers’ care approaches. Specifically, little is known about how a novel interprofessional maternity care team contributes to safe, compassionate, and dignified care for individuals who use substances. We sought to understand how a strengths based interprofessional maternity care approach to care impacted both the

provider (midwife, obstetrician, and psychiatrist) and the patient. It is well reported that lack of engagement and barriers during the prenatal period are related to fear of child apprehension, not being heard, care provider qualities, and perceived stigma associated with substance use during pregnancy (Heaman et al., 2018; Holt & French, 2020). The perspective of the patient is needed to understand what influences and contributes to the patient's engagement in maternity care. We wanted to understand if a novel interprofessional maternity care approach made a difference in an individual's experience in the health care system.

Study Significance & Purpose

Our objective was to acknowledge the patient's voice and accentuate their perceptions of their care experiences with the interprofessional maternity care team. The results were solicited using a strength-based lens regarding the experiences of safe, dignified, and compassionate care, which can challenge the status quo and lead to a problem-focused approach. Knowledge Carrier and Grandmother Shingoose acknowledged the importance of the study because it focused on the patient's perspective to strengthen safe cultural care approaches, decrease stigmatization, and that the research team acknowledged the intergenerational trauma in Indigenous persons that is connected to substance use (personal communication, May 2, 2023). The goal was to have qualitative data that highlights strengths and identifies opportunities for improvement. The purpose of the study was to:

1. Explore how individuals who are pregnant and have used substances experience the health care system with an interprofessional team during pregnancy, birth, and postpartum.

2. Identify strategies from a strength based appreciative inquiry lens to support safe, dignified, and compassionate care for individuals who are pregnant and have used substances from pregnancy through birth and the postpartum period.

Methods

We employed appreciative inquiry as a qualitative method to guide the compelling, complex, and contextually embedded questions relevant to the proposed research (Reed, 2007). This approach was consistent with other researchers who have investigated clinical health phenomena as it sought to generate knowledge and evidence to inform clinical practice (Merrill et al., 2022). We utilized appreciative inquiry as it: 1) provided a positive means to explore, discover, and transform systems (Cooperrider & Whitney, 2005), 2) oriented well with integration of trauma informed principles (Seng & Taylor, 2015), and 3) aligned with Indigenous methodologies (Leeson et al., 2016). When using appreciative inquiry, researchers understand that all voices have the opportunity to be heard, understood, and respected (Ludema & Mohera, 2003). Having patients share their ideas on ways to provide the best possible care honored the patient at the center of the healthcare team (Trajkovski et al., 2015). The entire research team and ethics approval boards were supportive of the use of appreciative inquiry as it fits with Indigenous research methodologies that focus on social contexts and strength based, life-giving stories versus deficits.

Design

The five processes of appreciative inquiry that were followed included: 1. Choose the positive as inquiry (issue statement versus problem focused statement), 2. Inquire into exceptionally positive moments during data collection, 3. Share the stories and identify life-giving forces during data collection, 4. Create shared images of a preferred future (during data

collection and analysis), and 5. Innovate and improvise ways to create that future during data collection, analysis and dissemination (Watkins et al., 2011). Questions were constructed to illuminate the patient, care providers, and interprofessional care model. The appreciative inquiry approach acknowledged the socially constructed element to human experience and capitalized on human commonalities, as well as individual expressions (Cooperrider & Whitney, 2005; Ludema & Mohera, 2003). Methodological strengths include logic and structure, as well as its orientation toward the generativity of knowledge and opportunities to inform practice with relevant findings (Bushe, 2007; Hung et al., 2018).

We had expert guidance from our Indigenous scholar, Dr. Wanda Phillips Beck, and Knowledge Carrier and Grandmother Shingoose in anticipation that some patient participants would identify as First Nation, Metis, or Inuit. We aimed to consider the Indigenous historical context and provided support for those interested to meet with Knowledge Carrier and Grandmother Shingoose before, during, and following their interviews. We completed all the criteria to meet the Consolidated Criteria for Reporting Qualitative Studies checklist (Tong et al., 2007). Researchers completed the First Nation Ownership, Control, Access, and Possession (OCAP®) training (First Nations Centre, 2007). The research study was conducted in compliance with the protocol), *Tri-Council Policy Statement 2* (Government of Canada, 2022) and applicable federal, provincial, and local regulatory requirements. Ethical approval was obtained from the University of Manitoba Health Research Ethics Board, Shared Health Ethics committee, and the First Nation Health and Social Secretariat of Manitoba. All participants were informed of the objectives and design of the study. Written or verbal consent was received from all participants.

Setting

Research participants were recruited from a maternity ambulatory care clinic that is part of an urban, inner-city, Western Canadian hospital. The clinic staff included an interprofessional group of care providers from midwifery, obstetrics, and psychiatry professions. This interprofessional team provides care during the prenatal, birth, and postnatal period for individuals with complex care needs inclusive of substance use. The interprofessional care providers commenced this care model approach in Fall 2021. Members of this interprofessional care team identified the importance of safe, dignified, and compassionate care for individuals who are pregnant and have used substances when the care model was developed. Their goal was to integrate patient-engaged research initiatives to support the long-term sustainability of an interprofessional care model. The interprofessional care team has articulated a detailed values development and process document to explain their care approach (see Appendix O). Patients can access the maternity ambulatory care clinic at any time during their pregnancy and return for postpartum care up to six months following the birth of their newborn. The obstetrician care provider is also on call for the client's labor and birth. Most clients are referred to the clinic by their family physician, nurse practitioner, or via word of mouth from previous patients who attended the clinic.

Sample

We used a purposive sample to recruit individuals who received care at the clinic. Inclusion criteria included any English-speaking patient 18 years an older who had one or more visits at the Maternity Ambulatory Care Clinic, engaged with more than one clinician on the interprofessional care team, and acknowledged any substance use during their most recent pregnancy. The care providers have a universal screening tool that indicates use of alcohol or

substances during pregnancy and is completed with each patient. The principal investigator (first author) conducted individual the interviews from August to December 2022.

Study Procedure

Patients were recruited by the care providers from the interprofessional maternity care clinic (second and third author). For the initial step of the recruitment process, providers obtained consent to be contacted for the interview. If the person agreed to be contacted, the health care providers from the interprofessional maternity care clinic initiated a consent to contact. If the patient agreed to be contacted, the principal investigator (first author) connected with them, and an interview was scheduled. Patients had the choice to be interviewed face-to-face or over the phone. The semi-structured interviews that took place were exploratory in nature and used open-ended questions (Polit & Beck, 2017). This was particularly useful for collecting rich, detailed information (Corbin & Strauss, 2008; Reed, 2007) and is reported to be a fundamental step in qualitative research to improve patient and health care providers' experiences (Edgman-Levitan & Schoenbaum, 2021). The semi-structured interview guide (See Appendix H) guided the interviewer to ensure the research aims were addressed. The interview guide was reviewed by experts in appreciative inquiry and the entire research team. This was an attempt to ensure questions were both aligned with appreciative inquiry methodology and culturally appropriate.

The interviewer (first author) used a curious, transparent, and relational approach to learn about participants' experiences (Josselen, 2013). The relational approach started before the interview began by preparing the interview room to be comfortable, having a list of supports available for everyone, and having Grandmother Shingoose available for participants to debrief. During the interview, trauma-informed approaches were also taken to minimize unintentional

(re)traumatization. Considerations were made to have a well-lit room, food, light refreshments available, and an approach that was not rushed and/or encouraged breaks as needed (Seng & Taylor, 2015). In addition, the interprofessional team was present in the clinic during the interview. While the health care team was not involved in the interview process, they were available to support as needed, as they had relationships with the participants. The participants were all offered a copy of their interview transcript. All participants agreed to have a copy emailed to them and had the opportunity to edit or omit any part of the transcript. The transcripts were sent to the email address participants provided and did not have any patient identifiers. We provided a $50 gift card to each study participant for remuneration. Interviews ranged from 25 to 60 minutes, depending on participants' responses.

Data Analysis, Interpretation, & Rigor

Research team members (first and second author) met from December 2022 to March 2023 to analyze the data. On-going consultation with an Indigenous Scholar (fifth author) and Knowledge Carrier and Grandmother Shingoose (fourth author) took place during this time. Rigor was enhanced by bracketing using reflective and analytic memos to document the researchers' thoughts and decisions (Davies & Dodd, 2002; Lincoln & Guba, 1985). Bracketing was undertaken to mitigate the potential effects of preconceptions that might taint the research process (Tufford & Newman, 2012). Research team members interviewed and bracketed our responses prior to the first participant interview. Additionally, memos were written by the research team throughout data collection and analysis.

Transcripts were read in their entirety multiple times to gain a sense of the whole and to identify key words or phrases to form codes, themes, and subthemes (Polit & Beck, 2017). Themes were constructed following Braun and Clarke's (2006) steps to thematic analysis.

Constant comparative analysis techniques were used to identify, code, and categorize patterns in the data. These were based on patterns identified using MAXQDA and the researchers' review of the data. We used thematic network analysis to construct a conceptual diagram of the participants' perceptions of care provider characteristics (Attride-Stirling, 2001) – see Figure 1. This summarized the main themes across texts and is a credible way to present the results of qualitative analysis. In this article, we present quotes without any participant identifiers or use of pseudonyms. There are quotes shared from all fourteen participants.

Results

Participant Characteristics

There were fourteen participants interviewed: five prenatal and nine postpartum individuals. Ten interviews were in person and four were on the telephone, as per participants' preference. Participants were Caucasian, First Nation, and Metis individuals and the age range was 21-39 years. Participants identified as female or non-binary. Participants reported previous and/or current substance use that included opioids (codeine, fentanyl, morphine, heroin), marijuana, and methamphetamine. Some of the participants were on opioid antagonist therapy (suboxone or methadone). Postpartum participants were 6 days to 9 months postpartum and all had custody of their newborn. Four participants had children from previous pregnancies that were living out of their care; they were all actively pursuing legal action to have their children live with them full time. Participants self-reported that they entered prenatal care between 12-14 weeks and attended over 90% of their scheduled visits with the interprofessional care team.

Patients' Perceptions of Care Providers

Participants were asked to describe how the interprofessional maternity care model and care providers promoted safe, dignified, and compassionate care. All participants engaged with

the midwife and obstetrician, and the majority met and worked with the psychiatrist. Many participants acknowledged the benefit of working with more than one "*expert"* and "*specialist"* on maternity care.

The thematic analysis of the interviews revealed safe care themes: providers not judging, being reassuring, fostering a peaceful relationship, and incorporating harm reduction; compassionate care themes: provider kindness and listening; and dignified care themes: provider acceptance, patients deserving care, shared decision making, and provider honoring patients' natural supports. Connection was added as a key component of the provider and patient relationship, with the themes of continuity and mutual trust. The participants determined that the identified interprofessional care team qualities should be the same during the prenatal, birth, and postpartum periods. Themes and subthemes are further described below with supporting patient participant quotes.

Safe Care

Participants provided specifics that defined safe care; these included a provider approach that does not judge, promotes reassurance and a peacefulness in the patient provider relationship, and incorporates a harm reduction approach that works for them.

Theme: Not Judging

The most important characteristic to all fourteen participants was a care provider that does not judge at any point during care interactions. According to one participant, not judging was inclusive of: *"all of the choices I made throughout my pregnancy and birth plan. There was no judgment, and they were super helpful throughout it all."* Overall, not judging meant not stigmatizing and reacting, no matter what patients tell their providers. Many participants described this as important because not judging meant they could ask questions

related to substance use and pregnancy, continue or start medication assisted therapy, and discuss their fears of child apprehension. Many participants shared stories about their care interactions outside of this clinic that were judgmental and "*not helpful*" leading to disengagement in care and "*lack of trust*" in the system.

During data analysis, the research team members noted that the participants used the term not judged versus nonjudgmental. As one care provider at the clinic stated in their research memo: "*Not being judged means patients come in ready to be judged. Judging equates to the word abuse."* One study participant elaborated that no judgment means "*I can tell them anything.*" Many participants noted that they returned for prenatal appointments, birth in the acute care setting, and follow-up postnatal care because they simply were not judged and did not feel threatened. One participant stated that "*it is important to be in a place where you are not judged so you come back*."

Theme: Reassuring and Peaceful Relationships

Several participants emphasized the importance of a reassuring and peaceful relationship during patient and provider interactions. A provider patient relationship was noted by participants to be peaceful when people accepted each other for who they are. Participants shared the following about their experiences with the interprofessional care team providers: "*I feel relaxed here. I do not find it stressful… I do not feel judged"* and "*They always reassured me that everything was going to be okay. I never felt that before. That is what makes them stand out so much."* A provider at the clinic and a research team member stated in their reflective memo that: "*When patients' lives are riddled with various levels of physical and emotional violence, a peaceful and reassuring relationship is safe."* Participants acknowledged that the providers aimed to be transparent in their communication and make sure they felt safe, not fearful. One

participant summarized the relationship as: "*It is easy. I am friendly to them, and they are friendly to me*."

One participant described a clinic visit as follows: "*They let me lay there. The midwife said I look really tired so said have a 5-minute rest and then I will come back. I just rested in the room and kept my eyes closed. Ya, that was really good*" and another stated "*I was not rushed, some days I just needed a minute to sit*" when at the clinic. Another described "*that peaceful vibe that they gave me. The helpfulness that was important. It made me feel safe*." In a data analysis memo, one research team member noted that patients "*did not talk about the ultrasound – this highlights the relational component as the intervention.*" The participants noticed that the patient provider relationship was built on approaches that diminished fear and promoted safety through reassurance and peacefulness.

Theme: Harm Reduction

Participants described harm reduction from their perception that was safe and unique to them. One participant described how much coffee they drank and was not judged because it was better than cocaine. Another participant said: "*I found out I was pregnant really late. Which is not a bad thing as I was on suboxone because I am a recovering addict, I am still on it. They said I am safe."* We noticed that harm reduction means something different to each of the participants, depending on where they were in their recovery journey. In one researcher and clinic care provider's memo, harm reduction for the participants was summarized as "*suicide prevention, keeping moms and babies together and/or prescribing medication agonist therapy."* Harm reduction and recovery-oriented treatment that the providers offered was described by one participant as life saving:

"The care actually saved my life. If I were to drink, I would have gotten into harder and harder drugs because I am a recovering addict. I told her that, if I was going to drink, I was going to inject drugs and lose my baby. And I told her that over the phone and the doctor (obstetrician) got me a medical clearance form filled out and got me in. The doctor knew I was feeling very alone, and I was not eating properly. So, they really helped me get into detox. The doctor really saved my baby's life. As well as my own life."

Knowledge Carrier and Grandmother Shingoose shared her observations and stated, "*Moms knew they had to take care of themselves and their babies; they acknowledged that their substance use was a result of intergenerational trauma and/or addictions that started before they were pregnant"* (personal communication, May 2, 2023).

Compassionate Care

Participants described compassionate care as an approach that was kind and included active listening. Patient participants noted that their interprofessional care providers were kind and listened no matter what they were sharing during their appointments. Several participants commented on the care provider's ability to remember details about their pregnancy, family, or living situation.

Theme: Kindness

When participants described compassionate care, the most common word used was kind. The participants noted that the interprofessional care team was *"very kind and very understanding… not dismissive. "Making sure I have everything in place. They are just as excited about my baby as I am."* Another participant stated: "*They (care providers) made sure I was okay. Got to the bottom of it. Were kind and called me back."* The care providers' acts of

kindness made a difference in their everyday lives. One participant acknowledged that "*when I was sick from the orange drink, they made sure I was okay. This mattered."* And another said:

"The doctor made me feel comfortable and it is crazy to say this, but I get scared when the baby is moving around. Getting pregnant and the pain coming too. I would call and have them page her for me to ask her questions. Like, about the baby moving and the doctor would say it is a good thing and reassure me, and I would call her for things like that. They were always really nice and stuff…. It was motherly."

Kindness in relation to pain medication was also discussed. Patients described compassionate care providers as those that were kind and offered pain medication during their birth and postpartum hospital experiences. A research team member who is also a clinic provider wrote: "*We have lots of conversations about pain medication and increasing understanding about use of pain medications during labour. Patients are hugely relieved when they are reassured it will not cause a relapse. They (patients) are still harmed by the system when staff withhold pain meds; this feels punitive"* was in a memo following data analysis.

Theme: Listener

Many participants described compassionate care as an act of being listened to during their care interactions with the interprofessional maternity care team in the prenatal, birth, and postnatal setting. One participant stated: "*I want them to listen….They listen to me more; they listen to how I feel and how I feel about people. That is being compassionate."* And another noticed "*that they listen, do their best to help."* The act of listening was described by participants as: "*They sit there, and they listen (pause) attentively. I can tell they are listening."* Two participants shared that being listened to meant "*they listened, and they cared. They really cared about me as a person"* and "*Dr. offices they do not ask anything other than medical questions. It*

is not like here; they talk to you and get to know you. Then they were asking lots about my family. They made me feel comfortable."

Dignified Care

Dignity was described by participants as acceptance, providing the care people deserve, shared decision making, and honoring patients' natural supports (e.g., grandmothers, sisters, community members).

Theme: Acceptance and Deserving

Participants noted that providers who accept people and provide them with the care they deserve makes a difference. Many of the patient participants talked about looking forward to their clinic appointments as "*they pay attention to your needs. They actually care."* Another patient participant stated:

"Not used to being treated that good… they made the effort to get to know me…. Always considerate of how I feel… I was not used to going to a Dr. office and having people like come in and talk to you, like treat you like that, that good…. It was different, they made the effort to get to know me, ask about me and my life. They were – I guess – trying to connect on a more personal level. Well, they pay attention to you, and they care."

A research team member reflected this in their data analysis memo and stated : "*It is like patients are heard for possibly the first time and they (care providers) accepted it."* and "*Many patients are beaten down; they do not believe they deserve to have good care. Have constantly been questioned and resulted in dignity being swept away. This care model gives them a sense of dignity where they are treated fairly."*

Theme: Shared Decision Making

Dignified care was described by patient participants as care that incorporated shared decision making. Examples included deciding on appointment times, making their own medical decisions (birth plan, feeding method for baby, use of coffee instead of cocaine), and to request or refuse pain medications during labor and birth. One patient participant said I have "*Choice and my voice is heard"* and another offered that dignified care is "*choices... I can ask questions even about my mental health. I am very comfortable with them."* A patient participant summarized dignified care as: "*I have always felt safe making decisions here. That is dignified care."*

Theme: Honoring Natural Supports

The theme of providers honoring natural supports was named by Indigenous Knowledge Keeper and Grandmother Shingoose. Many participants shared stories about their relationships with natural supports that made a positive difference to their pregnancy, birth, new baby, and their ability to attend clinic appointments. Grandmother Shingoose noted that providers must:

"*Acknowledge Moms have the support system – natural support system in place. Sometimes they are on their own and then in crisis – support systems come out of nowhere. Such as grandmothers, leadership, community members. Ancestors are behind Mom. Trust the natural systems in place. There are many examples here where care providers honored the natural supports."*

The following are participant quotes that aligned with the dignified theme of honoring natural supports: "*I said I am not force feeding my baby because she is puking it all up. My Grandma said the same thing…. Then the doctor from my clinic who knew me said it was okay if me and my Grandma said not to force feed."* Grandmother Shingoose also highlighted the

importance of the mother baby connection being a natural support. One participant said "*now that my baby is here, he is a big help. And I want my other kids back."*

Connection

The patient participants identified that connection between provider and patient is based on continuity and trust. Connection was described as one of the most significant benefits of the interprofessional maternity care team approach. The comfort of having the same providers from prenatal through postpartum was an identified strength of the interprofessional care team.

Theme: Continuity of Care

Continuity of care is described by participants as "*having the same people all the time…it really was good not to worry who I was going to see.*" All fourteen participants agreed that having a team was beneficial for the continuity; several noted that not having to retell their stories made a difference to their mental health. One participant talked about past experiences when they did not have a connection to the birth attendant. A participant shared "*I had someone who I did not know, no connection. They did not know me personally. So having someone there who I have already built a relationship with is better for me. I am more comfortable with that.*" Other participants offered that having them (the interprofessional care team) to talk to each other about the "*care I needed, my birth, and medications was good.*" Others recognized the benefit of the midwife and obstetrical team coverage by stating "*the team covers for each other. My doctor was going to be away when I was due, and I knew the midwife would be there. No need to meet anyone new for the birth of this little one*." Some of the patients were unaware of the interprofessional care team model when they attended their first appointment. One participant shared:

"*I did not know I was going to get both a midwife and a Dr., so I was surprised. And then they were both really nice, it is a good experience here. They are sweet and nice. They pretty much ask me what I want for my plan and what I do not want and what I want for birth. They come in and look at the baby. They make sure I am comfortable.*"

The continuity and maternity expertise build comfort in patients. Another stated: "*I am confident that there is a team. They know their roles and it makes me feel more confident.*" Although not all patients interacted with the psychiatrist, those that did noted they felt comfortable as the psychiatrist had specialized knowledge in psychiatry during pregnancy. One participant stated: "*It made sense to see the psychiatrist at the clinic, they knew what was best during pregnancy and after I had the baby."* As one researcher who is also a care provider noted in their memo following data analysis: "*Many patients are retraumatized without continuity. There is an essence of harm reduction with continuity."*

Theme: Trust

Trust was identified as an essential part of connection by many participants; they described trust as important because it alleviated fear. One participant said: "*I could tell them anything and not be scared*" and another stated: "*I trusted them, even when talking about child and family services stuff. I had to be honest with that kind of stuff. I was happy to share to only them and not retell it all the time.*" This was affirmed by another patient that stated: "*I am able to speak about things that really have nothing to do with my care and my well being. I can have full transparency on both sides. I need that to trust.*"

Trust in the clinic setting with the interprofessional care team was further described by a patient participant as follows: "*I like that they are trustworthy. Whenever you talk to her about concerns, she really gets to the bottom. And as soon as I need to get a prescription, I get it. And*

when I talk to them, they are honest and that works good with me." And as one care provider described in her memo: "*Having patients tell truths means the care providers can help them.*" Defining what care provider trust is in the clinic setting is described by a patient participant as: "*When I trust someone, I feel like I respect their boundaries and they respect mine. That is the base of trust. Communication is a big thing in trust. A lot of the time it is a feeling, feeling like safe and comfortable*."

Opportunities to Improve Care from Pregnancy through Postpartum

Participants were asked to identify opportunities within the clinic setting to improve the care experiences and clinic setting. The participants offered a few areas for improvement, including increased cultural programming, coordination of postpartum services, and increased support from some nursing staff in the postpartum hospital setting.

Cultural Care

There were insightful suggestions from participants to increase cultural programming at the clinic. Increased awareness regarding access to the existing ceremony room was suggested. Most participants were unaware that a ceremony room existed in the same facility as the clinic and birth center; they suggested that increased signage and communication about access to the ceremony room is needed. The ceremony room can be used for smudging, prayer, time with family, and has direct access to the patio where gardens exist. Grandmother Shingoose, who was present for face-to-face research interviews and consulted throughout data analysis, offered that Grandmother's presence at the clinic and for ceremonies would be beneficial for any interested patients. Participants that met Grandmother Shingoose during the face-to-face interviews were offered sage, which was well received. A few participants and Grandmother Shingoose suggested Indigenous art be displayed in the clinic to honor Indigenous ways and enhance the

institutional atmosphere. It was suggested to have art inclusive of the pregnant individual and their natural connection with baby and other supports as a welcoming image for everyone. A few participants also noted that they liked it when care providers wore beads and dressed casually.

Coordination of Postpartum Services

Study participants noted the benefits of having a small interprofessional care team located in one clinic. A few participants discussed the need for better coordination between the clinic interprofessional care team, pediatrician, and nursing staff during the postpartum hospital stay. Participants mentioned the concern with mixed messages regarding postpartum hospital discharge and newborn feeding from the clinic providers, pediatrician, and postpartum staff.

Another participant area of concern is the transfer of care from the six-week postpartum appointment to other care providers. The six-week appointment is often the last medically necessary appointment with a midwife and obstetrician. Patient participants discussed the lack of services and available family physicians following the six-week postpartum clinic visit. Further planning for a stable referral pathway with a warm handoff to primary care is needed for reassurance for the postpartum clients.

Increased Support in the Birth and Postpartum Setting

Participants shared opportunities for the care experience to improve during the postpartum hospital stay. A few patients stated that they were not offered pain medication as needed. Others stated that the postpartum nurse offered them opioids, which they thought was inappropriate given their substance use history. Participants offered that another area for improvement in the postpartum setting is related to support for patients who take breaks off the unit, especially for those that smoke and/or have a longer hospital stay. A few participants shared stories that involved judgment (rolling of the eyes, requesting patients to be “quick” to return)

from some of the staff when they left the unit to go outside. They compared this to other nurses who were helpful and willing to care for the baby when they left the unit to go outside.

Discussion

The findings from our study highlight the strengths of the participants, the interprofessional care team providers, and the interprofessional care model. The richness of this data emanated from its consideration of the patient as the expert being the user of the health care system (Phillips-Beck et al., 2021). It can be a challenging discourse to obtaining nonjudgmental care among individuals who have used substances during pregnancy. Individuals who have used or are actively using substances during pregnancy are often framed with the double stigma of being a drug user or "addict" along with a drug user who is pregnant or a mother (Holt & French, 2020). Stigma associated with substance use or "addiction stigma" is thought to exacerbate the structural and individual level barriers to treatment and care (Hatzenbuehler et al., 2015; Stengel, 2014). When individuals who have used substances during pregnancy interact with the healthcare system, they are often faced with judgment evoking shame and fear, and health care decisions regarding future interactions may be impacted, including cancellations and avoidance (WHO, 2014). It was evident among the fourteen participants that they were engaged with their clinic providers who aimed to work in a nonjudgmental clinic setting. Participants were also willing to share their care experiences with a research team and committed to strengthening and improving the health care system to be come a place that is safer. The WHO (2009) defines safe care as preventing errors and adverse effects associated with health care and causing no harm to patients. The participants further described what this looked and felt like for them and emphasized that safe care truly equates to no judgment. Showing up to the appointments and

participating in research despite the many barriers that some may face is brave and takes considerable vulnerability and effort.

The safe, dignified, compassionate, and connected experiences occurred because of commitment from the patient to trust themselves and the care provider. The participants identified the key themes that made care safe, dignified, compassionate, and connected and providers were able to reflect on the patients' insights. Consideration of how the positive, nonjudgmental health care interactions were experienced was well worth exploring. Adding peer support or a cultural support person such as an Indigenous doula for the birth and postpartum hospital periods could also benefit the patient experience (Copenac et al., 2018).

Connection in health care fosters social support for patients, is empathic, and essential to the promotion of health and prevention of illness (Soler-Gonzalez, 2017). Again, connection is not possible unless patients show up despite the risk of entering a health care system that has the potential to deliver inequalities in services related to structural violence, racism, and politics. The definition of dignity was described as an informed decision maker in one's care experience, having choice, and receiving respectful treatment from all care providers (Hill, 2013). Having a trusted care provider is key and being able to have a small interprofessional team where the patient can choose who to work with is unique.

Overall, participants reported that the interprofessional maternity care model is effective to promote shared decision making, continuity in care, decrease judgment and traumatization, and honor natural supports. Key characteristics of the midwifery ethic of care are informed choice (shared decision making) and continuity of care (Canadian Association of Midwifery Care, 2015). This philosophy can also be easily integrated into the care competencies of obstetricians overseeing high risk pregnancies affected by substance use. Our findings support

the critical role a midwife has in an interprofessional maternity care model for complex care patients. These values are also consistent with the Hospital Unintentional Re(Traumatization) (HURT) approach that promotes continuity to prevent (re)traumatization related to retelling a health history of substance use (Trauma Informed Care Institute, 2015) and a midwifery model of care (Canadian Association of Midwifery Care, 2015). The theme of compassionate care relates to the definition of being sensitive, providing empathic responses, and a willingness to help and to promote the well-being of that person (Perez-Bret et al., 2016). The prenatal, birth, and postpartum time requires compassionate care as each patient is undergoing both physical and emotional transformations.

How the patients engaged in care and providers enacted this level of care in a health care system known to have barriers and constraints was significant. The patient participants were able to describe solution focused, safe, dignified, and compassionate care approaches that increased their engagement in care, and improved outcomes for themselves and their babies. Understanding the impact of an interprofessional maternity care team that was noted to be life saving is invaluable.

Overall, the participants endorsed inclusivity in the clinic but expressed that cultural programming could be further incorporated in the hospital setting where the clinic was located. Although this paper is not meant to provide a complete historical account of the Canadian Indigenous experience, it is important to recognize the legacy of residential schools, historical and intergenerational trauma, and the assimilation policies that have left a strained relationship on Indigenous peoples and the health care system (Katz et al., 2018; McCallum & Perry, 2018). Suggestions from the participants are practical and included increased awareness about the ceremony spaces available for patients, diverse cultural art work being displayed in the clinic, the

possibility of having an Indigenous Grandmother available during clinic hours to share teachings about colonialism and traditions to those who are interested, offering peer support programs during the prenatal period, and additional familiar birth support during the acute care birthing and postpartum periods. This aligned with Phillips- Beck and colleagues' (2021) suggestions for decolonization in health care that repositions expertise in such a way that Indigenous peoples become experts in their own health experiences and own health initiatives.

Limitations

We were limited in our ability to capture how each participant's experiences had changed over time due to the study's cross-sectional design. The research findings and themes were emailed and shared with all participants but few of the participants responded. This may limit the trustworthiness of the reported findings because limited feedback was received. However, the themes were credible to the four participant respondents and research team. The research team is limited to the perspectives of maternity care providers from nursing, midwifery, and obstetrics and our Indigenous Knowledge Carrier and Indigenous scholar. The findings are based on the research teams' data analysis and the graphic recorder images developed. The semi-structured openness of appreciative inquiry has been critiqued as being broad (Reed, 2007); however, it was honored in our research to promote inclusiveness of responses. Despite efforts to bracket researchers and complete data checking with participants, there is always potential for interpreter bias.

Implications for Research and Practice

Our results suggest a need for a high level of collaboration between maternity health care professionals, patients, their natural supports, and community partners. The connected care approach relies on the patient and care provider trusting each other from pregnancy through the

postpartum period. The lessons learned from the participants suggest that care providers' qualities and an interprofessional care team with a nonjudgmental, kind, accepting approach matters. Health care systems should prioritize and invest in supporting a model of care that also promotes shared decision making for their patients. While midwifery is often associated with low-risk care, midwives have a critical role on interprofessional teams to provide and promote wrap around care for pregnant individuals who use substances. For example, harm reduction options can be offered to the patient and working to full scope of practice is required. The obstetrician in the clinic is an opioid agonist therapy provider, and the co-location of this service within the maternity care setting improves follow-up for both care priorities.

Communication between community partners (i.e., child and family services) beyond the maternity outpatient clinic is also important to improve communication and care approaches being offered. Professional development to improve a patient centered approach to pain management during birth and the postpartum period is required; substance use continues to result in withheld analgesia. Care providers in the birth and postpartum setting cannot make assumptions about patients' beliefs regarding pain medication, and staff need to recognize how implicit bias can interfere with personalized care delivery. Order sets and policies for individuals who have used substances during pregnancy that are trauma informed and culturally sensitive should be a priority for policy makers.

Future research needs to further examine this model of interprofessional maternity care to determine the long-term impact on maternal and child health. Primary outcomes of interest include child apprehension, child health, maternal mental health, and maternal mortality. Evaluation researchers have suggested that multifaceted services addressing health, addiction, housing, and parenting needs can improve parenting capacity and attachment, and reduce child

apprehension (Ordean & Kahan, 2011; Rutman et al., 2020). However, rigorous evidence on long term support is limited and should be a research and policy priority. Large scale linkage of health and social care data would facilitate ongoing research, program evaluation, and surveillance (Guttmann et al., 2019).

Conclusion

This research was the first of its kind to explore perceptions of pregnant individuals who use substances and their care interactions with an interprofessional maternity care team. Appreciative inquiry as a research method was generative in several ways as the strengths of the patient, care provider qualities, and existing care model were identified. The interview findings exhibited how patients perceived care provider qualities that are nonjudgmental as a key influencing provider characteristic for safe care. As providers and patients work together, every effort needs to be made to provide quality care each time an individual who has used substances during pregnancy engages with the health care system.

Our findings strongly support the need for an interprofessional maternity care team that is dedicated to accepting the patient where they are at, and using a safe, dignified, compassionate, and connected approach to all care interactions. Addressing the maternity needs along with the psychosocial and addiction concerns is imperative to provide the recommended wraparound care for individuals who use substances during pregnancy. The strengths of the patient participants included them not only showing up, but being connected with their care providers, trusting them, and participating in shared decision making.

References

Allen, L., Wodtke, L., Hayward, A., Read, C., Cyr, M., & Cidro, J. (2022). Pregnant and early parenting Indigenous women who use substances in Canada: A scoping review of health and social issues, supports, and strategies. *Journal of Ethnicity in Substance Abuse*, 1–31. https://doi.org/10.1080/15332640.2022.2043799

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research: QR*, *1*(3), 385–405. https://doi.org/10.1177/146879410100100307

Balneaves, L., Brown, A., Green, M., Prosk, E., Pain, L, Monahan-Ellison, M., McMillan, E., Zaid, J., Dworkind, M., & Waitling, C.Z. (n.d.). *Medical cannabis access and experiences in Canada*. Medical Cannabis Access Survey. https://www.medicalcannabissurvey.ca/report

Beals, J., Novins, D. K., Spicer, P., Whitesell, N. R., Mitchell, C. M., Manson, S. M., & American Indian Service Utilization, Psychiatric Epidemiology, Risk, and Protective Factors Project Team. (2006). Help seeking for substance use problems in two American Indian reservation populations. *Psychiatric Services (Washington, D.C.)*, *57*(4), 512–520. https://doi.org/10.1176/ps.2006.57.4.512

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bruzelius, E., & Martins, S. S. (2022). US trends in drug overdose mortality among pregnant and postpartum persons, 2017-2020. *JAMA: The Journal of the American Medical Association*, *328*(21), 2159. https://doi.org/10.1001/jama.2022.17045

Bushe, G. R. (2007). Appreciative inquiry is not (just) about the positive. *Organizational Development*, *39*(4),30–35. http://www.gervasebushe.ca/AI_pos.pdf

Bushnik, T., Yang, S., Kaufman, J. S., Kramer, M. S., & Wilkins, R. (2017). Socioeconomic disparities in small-for-gestational-age birth and preterm birth. *Health Reports*, *28*(11), 3–10.

Byrne, M., Murphy, A. W., Plunkett, P. K., McGee, H. M., Murray, A., & Bury, G. (2003). Frequent attenders to an emergency department: A study of primary health care use, medical profile, and psychosocial characteristics. *Annals of Emergency Medicine*, *41*(3), 309–318. https://doi.org/10.1067/mem.2003.68

Canadian Association of Midwifery Care. (2015). *Canadian midwifery model of care position statement*. Canadianmidwives.org. https://canadianmidwives.org/wp-content/uploads/2016/06/CAM-MoCPSFINAL-OCT2015-ENG-FINAL.pdf

Center for Behavioral Health Statistics and Quality. (2020). *2019 National survey on drug use and health: Methodological summary and definitions*. Samhsa.gov. https://www.samhsa.gov/data/

Centers for Disease Control and Prevention. (2022). *Substance use during pregnancy*. Cdc.gov. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/substance-abuse/substance-abuse-during-pregnancy.htm

Chilisa, B. (2011). *Indigenous research methodologies*. SAGE Publications.

Cooperrider, D. L., & Whitney, D. (2005). *Appreciative Inquiry: A positive revolution in change*. Barrett-Koehler Publisher.

Copenace, S., Cidro, J., Johnson, A., & Anderson, K. (2021).Auntie's Bundle: Conversation and research methodologies with Knowledge Gifter Sherry Copenace. In B. Hokowhitu, A.

Moreton-Robinson, L. Tuhiwai-Smith, C. Andersen, & S.Larkin, Routledge Handbook of Critical Indigenous Studies(pp.189-202). New York: Routledge

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.

Davies, D., & Dodd, J. (2002). Qualitative research and the question of rigor. *Qualitative Health Research*, *12*(2), 279–289. https://doi.org/10.1177/104973230201200211

Denison, J., Varcoe, C., & Browne, A. J. (2014). Aboriginal women's experiences of accessing health care when state apprehension of children is being threatened. *Journal of Advanced Nursing*, *70*(5), 1105–1116. https://doi.org/10.1111/jan.12271

Dumas, L., Lepage, M., Bystrova, K., Matthiesen, A.-S., Welles-Nyström, B., & Widström, A.-M. (2013). Influence of skin-to-skin contact and rooming-in on early mother-infant interaction: A randomized controlled trial: A randomized controlled trial. *Clinical Nursing Research*, *22*(3), 310–336. https://doi.org/10.1177/1054773812468316

Ecker, J., Abuhamad, A., Hill, W., Bailit, J., Bateman, B. T., Berghella, V., Blake-Lamb, T., Guille, C., Landau, R., Minkoff, H., Prabhu, M., Rosenthal, E., Terplan, M., Wright, T. E., & Yonkers, K. A. (2019). Substance use disorders in pregnancy: Clinical, ethical, and research imperatives of the opioid epidemic: A report of a joint workshop of the Society for Maternal-Fetal Medicine, American College of Obstetricians and Gynecologists, and American Society of Addiction Medicine. *American Journal of Obstetrics and Gynecology*, *221*(1), B5–B28. https://doi.org/10.1016/j.ajog.2019.03.022

Edgman-Levitan, S., & Schoenbaum, S. C. (2021). Patient-centered care: Achieving higher quality by designing care through the patient's eyes. *Israel Journal of Health Policy Research*, *10*(1), 21. https://doi.org/10.1186/s13584-021-00459-9

Eni, R., Phillips-Beck, W., Achan, G. K., Lavoie, J. G., Kinew, K. A., & Katz, A. (2021). Decolonizing health in Canada: A Manitoba first nation perspective. *International Journal for Equity in Health*, *20*(1). https://doi.org/10.1186/s12939-021-01539-7

First Nations Centre (2007). OCAP: Ownership, Control, Access, and Possession. Sanctioned by the First Nations Information Governance Committee, Assembly of First Nations.

Forray, A. (2016). Substance use during pregnancy. *F1000Research*, *5*, 887. https://doi.org/10.12688/f1000research.7645.1

Gone, J. P., Hartmann, W. E., Pomerville, A., Wendt, D. C., Klem, S. H., & Burrage, R. L. (2019). The impact of historical trauma on health outcomes for indigenous populations in the USA and Canada: A systematic review. *The American Psychologist*, *74*(1), 20–35. https://doi.org/10.1037/amp0000338

Government of Canada. (2018). *National Native Alcohol and Drug Abuse Program.* https://www.canada.ca/en/health-canada/services/substance-use/canadian-drugs-substances-strategy/funding/national-native-alcohol-drug-abuse-program.html

Government of Canada. (2022). *Tri-council policy statement: Ethical conduct for research involving humans – TCPS 2*. https://ethics.gc.ca/eng/policy-politique_tcps2-eptc2_2022.html

Government of Canada. (2023). *Opioid- and stimulant-related harms*. Canada.Ca. https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/

Graves, L. E., Green, C. R., Robert, M., & Cook, J. L. (2021). Methamphetamine use in pregnancy: A call for action. *Journal d'obstetrique et Gynecologie Du Canada [Journal of Obstetrics and Gynaecology Canada]*, *43*(8), 1001–1004. https://doi.org/10.1016/j.jogc.2020.11.017

Guttmann, A., Blackburn, R., Amartey, A., Zhou, L., Wijlaars, L., Saunders, N., Harron, K., Chiu, M., & Gilbert, R. (2019). Long-term mortality in mothers of infants with neonatal abstinence syndrome: A population-based parallel-cohort study in England and Ontario, Canada. *PLoS Medicine*, *16*(11), e1002974. https://doi.org/10.1371/journal.pmed.1002974

Gulbransen, K., Thiessen, K., Pidutti, J., Watson, H., & Winkler, J. (2022). Scoping review of best practice guidelines for care in the labor and birth setting of pregnant women who use methamphetamines. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN*, *51*(2), 141–152. https://doi.org/10.1016/j.jogn.2021.10.008

Haskell, L., & Randall, M. (2009). *Disrupted attachments: A social context complex trauma framework and the lives of Aboriginal peoples in Canada*. https://papers.ssrn.com/abstract=1569034

Hatzenbuehler, M. L., Jun, H.-J., Corliss, H. L., & Bryn Austin, S. (2015). Structural stigma and sexual orientation disparities in adolescent drug use. *Addictive Behaviors*, *46*, 14–18. https://doi.org/10.1016/j.addbeh.2015.02.017

Hayward, A., Sjoblom, E., Sinclair, S., & Cidro, J. (2021). A New Era of Indigenous research: Community-based Indigenous research ethics protocols in Canada. *Journal of Empirical Research on Human Research Ethics: JERHRE*, *16*(4), 403–417. https://doi.org/10.1177/15562646211023705

Heaman, M. I., Martens, P. J., Brownell, M. D., Chartier, M. J., Thiessen, K. R., Derksen, S. A., & Helewa, M. E. (2018). Inequities in utilization of prenatal care: A population-based study in the Canadian province of Manitoba. *BMC Pregnancy and Childbirth*, *18*(1), 430. https://doi.org/10.1186/s12884-018-2061-1

Hill, P. E. (2013). Perinatal addiction: Providing compassionate and competent care. *Clinical Obstetrics and Gynecology*, *56*(1), 178–185. doi.org/10.1097/GRF.0b013e3182802da0

Holt, K., & French, G. (2020). Exploring the motherhood experiences of active methamphetamine users. *Crime, Law, and Social Change*, *73*(3), 297–314. https://doi.org/10.1007/s10611-019-09862-5

Hung, L., Phinney, A., Chaudhury, H., Rodney, P., Tabamo, J., & Bohl, D. (2018). Appreciative inquiry: Bridging research and practice in a hospital setting. *International Journal of Qualitative Methods*, *17*(1).

Josselson, R. H. (2013). *Interviewing for qualitative inquiry: A relational approach*. Guilford Publications.

Kalaitzopoulos, D. R., Chatzistergiou, K., Amylidi, A. L., Kokkinidis, D. G., & Goulis, D. G. (2018). Effect of methamphetamine hydrochloride on pregnancy outcome: A systematic review and meta-analysis. *Journal of Addiction Medicine*, *12*(3), 220–226.

Katz, A., Chateau, D., Enns, J. E., Valdivia, J., Taylor, C., Walld, R., & McCulloch, S. (2018). Association of the social determinants of health with quality of primary care. *Annals of Family Medicine*, *16*(3), 217–224. https://doi.org/10.1370/afm.2236

Krans, E. E., Campopiano, M., Cleveland, L. M., Goodman, D., Kilday, D., Kendig, S., Leffert, L. R., Main, E. K., Mitchell, K. T., O'Gurek, D. T., D'Oria, R., McDaniel, D., & Terplan, M. (2019). National partnership for maternal safety: Consensus bundle on obstetric care for women with opioid use disorder. *Obstetrics & Gynecology*, *134*(2), 365–375. https://doi.org/10.1097/aog.0000000000003381

Leeson, S., Smith, C., & Rynne, J. (2016). Yarning and appreciative inquiry: The use of culturally appropriate and respectful research methods when working with Aboriginal and Torres Strait Islander women in Australian prisons. *Methodological Innovations*, *9*, 205979911663066. https://doi.org/10.1177/2059799116630660

Legislative Review Manitoba. (2018). *Transforming child welfare legislation in Manitoba*. Gov.Mb.Ca. https://www.gov.mb.ca/fs/child_welfare_reform/pubs/final_report.pdf

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.

Ludema, J., & Mohera, B. (2003). *The appreciative inquiry summit: A practitioner's guide for leading large-group change*. Berrett-Koehler Publishers.

McCallum, M. J. L., & Perry, A. (2018). *Structures of indifference: An indigenous life and death in a Canadian city*. University of Manitoba Press.

McLellan, A. T. (2017). Substance misuse and substance use disorders: Why do they matter in healthcare? *Transactions of the American Clinical and Climatological Association*, *128*, 112–130.

Merriel, A., Wilson, A., Decker, E., Hussein, J., Larkin, M., Barnard, K., O'Dair, M., Costello, A., Malata, A., & Coomarasamy, A. (2022). Systematic review and narrative synthesis of the impact of appreciative inquiry in healthcare. *BMJ Open Quality*, *11*(2), e001911. https://doi.org/10.1136/bmjoq-2022-001911

Mohr, B.J., & Watkins, J.M. (2002). *The essentials of appreciative inquiry: A roadmap for creating positive futures*. https://www.academia.edu/3369203/The_essentials_of_appreciative_inquiry_A_roadmap_for_creating_positive_futures

Ordean, A., & Kahan, M. (2011). Comprehensive treatment program for pregnant substance users in a family medicine clinic. *Canadian Family Physician Medecin de Famille Canadien*, *57*(11), e430–e435.

Perez, F. A., Blythe, S., Wouldes, T., McNamara, K., Black, K. I., & Oei, J. L. (2022). Prenatal methamphetamine—impact on the mother and child—a review. *Addiction (Abingdon, England)*, *117*(1), 250–260. https://doi.org/10.1111/add.15509

Phillips-Beck, W., Eni, R., Lavoie, J. G., Avery Kinew, K., Kyoon Achan, G., & Katz, A. (2020). Confronting racism within the Canadian healthcare system: Systemic exclusion of first nations from quality and consistent care. *International Journal of Environmental Research and Public Health*, *17*(22), 8343. https://doi.org/10.3390/ijerph17228343

Pierce, S. L., Zantow, E. W., Phillips, S. D., & Williams, M. (2019). Methamphetamine-associated cardiomyopathy in pregnancy: A case series. *Mayo Clinic Proceedings. Mayo Clinic*, *94*(3), 551–554. https://doi.org/10.1016/j.mayocp.2018.12.008

Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice*. Wolters Kluwer Health.

Prince, M. K., Daley, S. F., & Ayers, D. (2023). *Substance use in pregnancy*. StatPearls Publishing. Substance Use in Pregnancy - StatPearls - NCBI Bookshelf (nih.gov)

Reed, J. (2007). *Appreciative inquiry: Research for change.* Sage.

Ritland, L., Thomas, V., Jongbloed, K., Zamar, D. S., Teegee, M. P., Christian, W.-K., Richardson, C. G., Guhn, M., Schechter, M. T., & Spittal, P. M., (2021). The Cedar Project: Relationship between child apprehension and attempted suicide among young Indigenous mothers impacted by substance use in two Canadian cities. *PloS One*, *16*(6), e0252993. https://doi.org/10.1371/journal.pone.0252993

Rivera, E., Phillips, H., Warshaw, C., Lyon, E., Bland, P.J., & Kaewken, O. (2015). *An applied research paper on the relationship between intimate partner violence and substance use*. http://www.nationalcenterdvtraumamh.org/

Rutman, D., Hubberstey, C., Poole, N., Schmidt, R. A., & Van Bibber, M. (2020). Multi-service prevention programs for pregnant and parenting women with substance use and multiple vulnerabilities: Program structure and clients' perspectives on wraparound programming. *BMC Pregnancy and Childbirth*, *20*(1). https://doi.org/10.1186/s12884-020-03109-1

Seng, J., & Taylor, J. (Eds.). (2015). *Trauma informed care in the perinatal period* (1st ed.). Dunedin Academic Press.

Soler-Gonzalez, J., San-Martín, M., Delgado-Bolton, R., & Vivanco, L. (2017). Human connections and their roles in the occupational well-being of healthcare professionals: A study on loneliness and empathy. *Frontiers in Psychology*, *8*, 1475. https://doi.org/10.3389/fpsyg.2017.01475

Stengel, C. (2014). The risk of being 'too honest': Drug use, stigma, and pregnancy. *Health Risk Sociology, 16*, 36–50. https://doi.org/10.1080/136598575.2013.8684408

Shahram, S., Bottorff, J., Oelke, N., Dahlgren, L., Thomas, V., & Spittal, P. (2017). The Cedar Project: Using indigenous-specific determinants of health to predict substance use among young pregnant-involved aboriginal women. *BMC Women's Health*, *17*(1).

Strahan, A. E., Guy, G. P., Jr, Bohm, M., Frey, M., & Ko, J. Y. (2020). Neonatal abstinence syndrome incidence and health care costs in the United States, 2016. *JAMA Pediatrics*, *174*(2), 200–202. https://doi.org/10.1001/jamapediatrics.2019.4791

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, *19*(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work: QSW: Research and Practice*, *11*(1), 80–96. https://doi.org/10.1177/1473325010368316

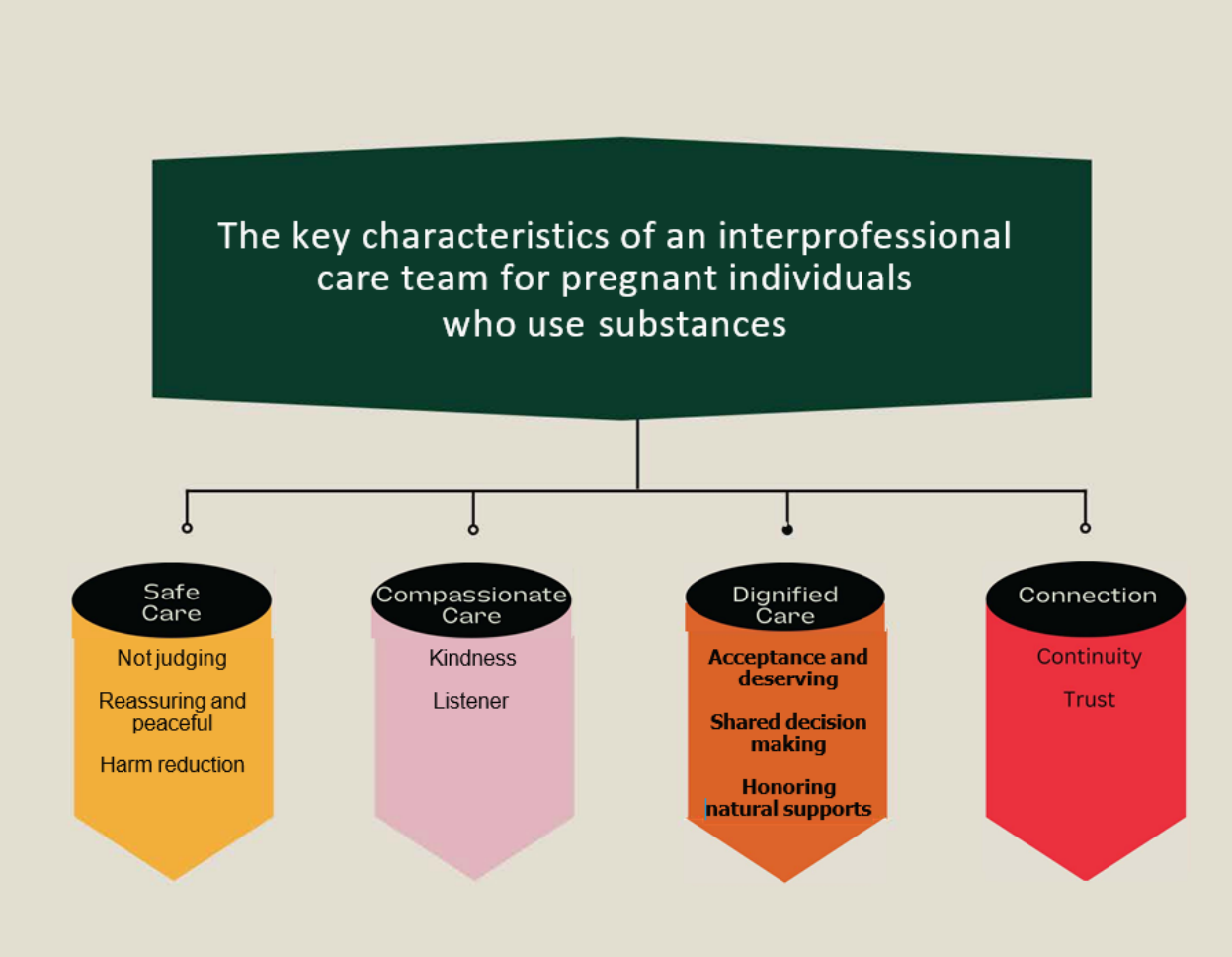
Watkins, J. M., Mohr, B. J., & Kelly, R. (2011). *Appreciative inquiry: Change at the speed of imagination* (2nd ed.). John Wiley & Sons.

Wendt, D. C., Hartmann, W. E., Allen, J., Burack, J. A., Charles, B., D'Amico, E. J., Dell, C. A., Dickerson, D. L., Donovan, D. M., Gone, J. P., O'Connor, R. M., Radin, S. M., Rasmus, S. M., Venner, K. L., & Walls, M. L. (2019). Substance use research with indigenous communities: Exploring and extending foundational principles of community psychology. *American Journal of Community Psychology*, *64*(1–2), 146–158. https://doi.org/10.1002/ajcp.12363

World Health Organization (2014). *Guidelines for identification and management of substance use and substance use disorders in pregnancy.* https://www.who.int/publications/i/item/9789241548731

World Health Organization. (2019). *Patient safety*. Who.int. https://www.who.int/news-room/fact-sheets/detail/patient-safety

Figure 1: Thematic Analysis



Chapter 5: Discussions & Conclusion

The overall aim of the thesis was to critically examine interprofessional maternity care models for pregnant individuals who use substances, with a specific focus on the patient perspectives. This critical examination occurred through a scoping review and a qualitative exploratory research study in a university affiliated interprofessional maternity care within an inner-city tertiary hospital. In this chapter, I present an overview of key findings from each chapter, followed by a discussion that synthesizes the findings from the thesis research. I offer key practice implications for health care providers, policy developers, and educators.

Overview of Key Findings

In this thesis, I set out to address the following objectives: 1) to identify, summarize, and analyze what is currently known about interprofessional maternity care models for pregnant individuals who use substances; 2) to utilize appreciative inquiry as method and illuminate the benefits of using appreciative inquiry; and 3) to explore patient perspectives of their care interactions with an interprofessional maternity care team. The following is a discussion highlighting the notable findings from each chapter which address the thesis objectives.

Chapter 2: Scoping Review

The scoping review provided an overview of interprofessional maternity programs for pregnant individuals who use substances. Eleven articles met full inclusion criteria for the scoping review following the 645 abstract reviews and 89 full text article reviews. It was apparent that there is a dearth of literature published on interprofessional maternity care models for pregnant individuals who use substances. There are a few published articles that report information regarding the composition of the interprofessional team and corresponding program and patient outcomes. Quantifying the program and patient outcomes for substance use

interventions was reported to be a challenge among experts in the field (Hodgins et al., 2019; Ordean & Kahan, 2011). Research is partially limited in this population due to underreporting of substance use and confounding variables that influence outcomes. Despite this some key recommendations for policy and program planners was gained. Voluntary patient participation in a treatment program was attributed for the success and high retention in prenatal care (Jones et al., 2021). Programs that offered co-location of several medical and mental health/addiction services contributed to a wraparound approach which are known for improved maternal and family outcomes (Rutman et al., 2020). The interprofessional care teams that included a social worker or community worker assisted patients to obtain services for housing, basic needs, and early-parenting. Overall, the interprofessional care models articles reviewed in the scoping review blended social, primary care, pregnancy care, and addictions to provide wraparound care in the community setting.

It was noted in the scoping review that the interprofessional maternity care teams for pregnant individuals who use substances differed on the number of people involved and their roles. The scoping review demonstrated the number of roles on the interprofessional care teams ranged from four to eighteen providers. It was not reported how often patients interacted with each of these members, or the patient experience and if they all engaged with the entire interprofessional care team. In the scoping review literature reviewed, the interprofessional care teams all included a specialized maternity care provider (obstetrician and/or midwife) during the prenatal through early postpartum period. Many of the programs reviewed in the literature indicated they were built on non-judgmental care, trusting relationships, and relational care. However, these characteristics were not well described with coinciding actionable approaches.

This finding influenced the qualitative phase of the research to gather data on the patient perceptions of care provider characteristics and how these were enacted.

Chapter 3: Appreciative Inquiry as Research Method

Appreciative inquiry was chosen for the research method primarily because it is solution and strengths focused. Most existing literature on pregnant individuals who use substances problematizes the patient and system. Using the appreciative inquiry research method was novel for exploring the perceptions of pregnant individuals who use substances.

Appreciative inquiry was systematic and appropriate to answer the thesis research questions. Participants were engaged in the research process and many commented that it felt good to discuss what went well for them and offer their ideas for improving the system. At the end of each interview participants had the opportunity to debrief the interview with the interviewer and/or Grandmother and Knowledge Carrier Shingoose. They were asked about the interview and invited to provide any feedback related to the interview process, questions, and experience. The participants confirmed that the interview was an appropriate approach and overall, they felt positive and comfortable when they shared their experiences and offered suggestions. A few participants shared that they were proud of themselves for doing a good job and contributing to research at their clinic.

Using the appreciative inquiry research method also meant that the research team was able to integrate trauma informed principles (see Chapter 3: Table 1) and culturally safe approaches. The appreciative inquiry approach threaded throughout the research process aligned with Indigenous ways of strength-based thinking and approaches. For example, questions were asked in a positive way during the semi-structured interview avoiding blaming or shaming and during data analysis we highlighted strengths of the patients, providers, and system. Despite

appreciative inquiry being a relatively novel research method, we would recommend that an appreciative inquiry research method be utilized in qualitative health related research. The appreciative inquiry method was appropriate for a population associated with being vulnerable and the topic of substance use being sensitive. This approach acquired patient insights into actionable solutions for providers and the system.

Chapter 4: Qualitative Exploratory Research

The nuances of the interprofessional maternity care model was discussed with fourteen participants during the semi-structured interviews. Participants were recruited based on two criteria: 1) Recipients of care from the interprofessional maternity care team; and 2) Acknowledgement of substance use at any time during their pregnancy. The participants offered insights into key provider characteristics and approaches that they perceived as critical to promote a safe, dignified, compassionate, and connected care approach. Participants shared that safe care occurred when care providers did not judge, provided reassurance, promoted a peaceful relationship and environment, and included individualized harm reduction approaches. Compassionate care reflected acts of kindness and listening. Dignified care encompassed acceptance and deserving care along with honoring patients' natural supports. Patient and provider connection was also identified as important. This was further described as a relationship grounded in trust, with continuity of care from prenatal through early postpartum. Another key finding was what the participants articulated about the benefits of care by an interprofessional maternity care team. Participants commented that the collaboration amongst the care providers was reassuring and that the team communicated effectively with each other as they were all working towards the goal set by the patient. Participants reported they felt reassured with the care decisions because they had an interprofessional care team that consulted

with each other. They also appreciated that the midwife and obstetrician would provide coverage for each other in the case that one of them was unavailable or away. A few participants also offered that the continuity made a difference to them as they did not have to retell their story to new providers each time.

Discussion

Best practice guidelines that are inclusive of the patient's perspective is best practice (Healthcare Excellence Canada, 2021). This thesis research has elaborated on what safe, dignified, and compassionate care is for pregnant individuals who use substances when engaging with an interprofessional maternity care team. Patients who participated in the qualitative research, provided their insights into actionable care approaches for providers to promote and provide safe, compassionate, dignified, and connected care. Based on the findings from the qualitative research we have summarized the practical examples for providers to incorporate this into their practice, see Table 1. The care provided by their interprofessional maternity care team was deemed as critical and life-saving to many of the participants. This is a significant finding considering the increased maternal mortality and morbidity related to substance use among pregnant individuals (Campbell et al., 2021; Denison et al., 2021; Gemmill et al., 2019). All providers must consider that each health care experience or point of care in the system will influence future health seeking behaviors (Doyle et al., 2013). Providers who can meet patients where they are at without judgment is all that most patients ask for (Mate, 2005).

Table 1: Practical Safe, Dignified, Compassionate and Connected Care Approaches

Theme	Subtheme	Practical and/or Actionable Approaches
Safe	Not Judging	Reacting with unconditional positive regard when a patient screens positive for substance use or relapses. Using moral neutrality. Do not shame, instead gain understanding about addictions and recovery.

	Reassuring and Peaceful	Using positive language versus negative. Validating that effective and loving parents can have substance use disorders. Offer statements such as “you are a going to be a good Mom” or “glad to see you for your appointment today, it can take a lot of effort just to get here” .
	Harm Reduction	Co-locate opioid agonist therapy in the same setting as maternity care. Offering prenatal care along with access to other recovery services like detox. Stating that harm reduction is hard and little steps matter. Validating that all efforts count whether they are to reduce infectious risk, limit violent exposures, attend prenatal care, or take medications. Recovery is not “all or nothing”
Compassionate Care	Kindness	Taking time during appointments, not rushing patients before or after appointments. Have clinic space for a safe resting place, opportunity to use phone or computer as needed. – patients were offered to nap for a few minutes before or after seeing their providers and this meant a lot.
	Listener	Have providers take time to get to know patients beyond the medical, if patients want to share about their pasts take the time to listen. Limiting the number of questions at one time; invite follow up visits or more frequent visit to explore more and foster trusting relationship.
Dignified Care	Acceptance & Deserving	Offer comprehensive care that is offered to all patients during the prenatal through postpartum periods. Validate that patient histories do not define deservingness. Engage in cultural humility, and relational humility. Acknowledging that each patient is an expert in their own lived experience.
	Shared Decision Making	Care plan with patient goals. Address high anxiety topics such as analgesia with information sharing and collaboration. Invite questions and address previous negative experiences.
	Honouring natural supports	Invite the patient to include valued community and family members in decision making, respect traditional teachings, and honor the meaningful contributions from members outside the maternity care team.
Connection	Continuity	Provision of as much care as possible from the familiar core team. For example, lab work drawn by the midwife, dating scans by the obstetrician, being present as much as possible during triage, admission, birth or immediate postpartum.
	Trust	Maintain patient confidentiality and limiting new faces as unnecessary ‘retelling’ of one’s story can be retraumatizing.

		Including the patient in team huddles, consider care "nothing about me without me" approach.

Interprofessional Perinatal Care Team

Perinatal care during childbirth and pregnancy can be provided by midwives, family practitioners, and obstetrician gynecologists, either individually or collaboratively (Morgan et al, 2014). Each of these providers have unique but overlapping areas of competence and expertise. Interprofessional care teams are described as collaborative and best practice for pregnant individuals who use substances (Ecker et al., 2019; Gulbransen et al., 2022; Krans et al., 2018; Raffie et al., 2021; Rutman et al., 2020). In Kramlich and colleagues (2018) study, pregnant individuals who use substances were shuffled between providers and reported that it was uncomfortable due to the stigmatization and providers lacked consistency in their approach. The continuity of care between the care providers and a pregnant individual who uses substances is critical for patients to build trust and continue to engage with the health care system (Ecker et al., 2019; Renberger et al., 2020, Rutman et al., 2020).

The combined expertise and scope of practice that an obstetrician and/or midwife can offer to a pregnant, birthing, and postpartum individual is important during this time to meet the patients' maternity needs. In this study, the interprofessional maternity care team for the study participants included a smaller interprofessional care team with a midwife, obstetrician, and psychiatrist. The patients also received care from the labour and postpartum nurses at the hospital and pediatrician following delivery of their newborn. According to the majority of the participants, this smaller interprofessional care team provided the care they needed. Other participants noted that a peer support person or Indigenous Elder or Grandmother would be a welcome addition to this interprofessional team. Some individuals requested that lab work be

completed by a member of the familiar interprofessional maternity care team so they did not have to interact with other providers that did not know them or their stories. The characteristics and approach of each interprofessional maternity care team provider on the team was important to the participants in the qualitative study. The participants descriptions of safe, compassionate, dignified, and connected care provides insight for care providers to approach care in a way that honors the patient as a person.

According to the participants, the continuity of care within the care clinic where the qualitative study took place contributed to the development of trust between provider and patient. The data from this thesis research further highlighted the positives of having the same interprofessional care team providing care across the continuum of pregnancy, birth, and postpartum. Health care systems and best practice guidelines that support maternity care providers to care for pregnant individuals who use substances across the continuum fosters continuity of care. This has been reported to decrease retraumatization for patients and is an important part of providing trauma informed care (Menscher & Maul, 2016; Seng & Taylor, 2015). The participants suggestions for maximum continuity also aligned with culturally safer ways as continuity of care is the basis for trust and relationship development (Kramlich et al., 2018; Viverios & Darling, 2018). Continuity of care approaches, go beyond policy creation and are a commitment from the system and providers to make this a reality for patients. The interprofessional maternity care team developed a document to further describe the values, development, and processes for their clinic, see Appendix O (Watson et al., 2023).

A wraparound approach has been identified as best practice for pregnant individuals who use substances (Rutman et al., 2020). The success of the wraparound approach has happened for this population when respectful and flexible services are provided to meet their diverse needs.

The commitment to provide best practice with a wraparound approach requires employment of an interprofessional care team and/or strong partnerships in the community (Jones et al., 2014; Rutman et al., 2020).

Considerations for Best Practice Implementation

It is important for providers to consider that different worldviews about addiction, substance use, and recovery exist (University of British Columbia, 2021). While these views need to be considered, health workforce planning needs to include grounded evidence that supports innovative models of care to meet population health needs. Additionally, the strong discourses of the biomedical system and a focus on individualism that can exist in the healthcare system needs to be addressed (Farre & Rapley, 2017). Implicit bias that can occur when caring for pregnant individuals who use substances is often eclipsed by the misperception that substance use disorder is a personal weakness or a willful choice (Massachusetts Health Policy Commission, 2021). It is common for providers who interact with individuals who use substances to show unconscious bias, this can result in fewer treatment options offered resulting in poor maternal and neonatal outcomes (Massachusetts Health Policy Commission, 2021). Stigmatization can be the roadblock that prevents patients from entering the health care system (Government of Canada, 2019; Holt & French, 2019; WHO, 2014) and receiving the medically essential prenatal, birth, and postpartum care that providers consider essential to improved outcomes (Heaman et al., 2018). Implicit biases and stigmas that exist towards individuals who use substances and are pregnant should be addressed in provider education, best practice guideline development, and implementation.

Safe Care

Safe care should go beyond the biomedical aspects of patient safety. This approach must be adopted by providers committed to shifting conventional care approaches that are judgmental and stigmatizing (Holt & French, 2019). Provision of care, informed by the patient can promote less stigmatized care and safe care (Government of Canada, 2019; Holt & French, 2019; WHO, 2014). A safe culture in the health care setting occurs when there is a high level of emphasis placed on safety beliefs, values, and attitudes by the providers (Workplace Health and Safety Queensland, 2013). It is important to consider how definitions of safe care may differ between health care organizations, policies, providers, and the patients they interact with. Safety for patients is recognized as a global health priority by the World Health Assembly (2019). The WHO (2019) defines patient safety as fundamental to delivering essential health services that are effective, safe, and people centred along with being timely, equitable, integrated, and efficient. The participants in this study defined safe care differently; they described safe care as not being judged by providers, being provided reassurance and peace, and incorporating harm reduction. The participants focused on non-medical attributes of safety that were affiliated with doing no harm, such as not judging whereas the WHO lists medical practices and risks related to patient situations such as medication errors, infections, unsafe surgical procedures, diagnostic errors, and sepsis (WHO, 2019). The evidence from this study, supports adding nonjudgmental care to the definition of safe care.

Harm Reduction Programming and Policy

Policies and program philosophies that aim to reduce the negative health, social and economic consequences that ensue for pregnant individuals who use substances is known as

harm reduction (Government of Canada, 2018). As best practice guidelines, policies. and programs are developed there is a need to incorporate a harm reduction philosophy along with low barrier health care access (Dombroski et al., 2023). Programs that have facilitated low barrier access for women have included: flexible or walk in appointments, options for virtual appointments, transportation, incentives for clinical visits, collaborative care providers (Dombroski et al., 2023; McGeough et al., 2020) childcare (Bright et al., 2018), and priority for pregnant individuals to triage immediately into detox, (Jones et al., 2013). Some of these facilitators for low barrier access were confirmed by our study participants; they reported on the flexibility in appointments, the welcoming of other children or making appointments during times when child care was available, not being rushed during appointments, and being set up into detox within less than 24 hours. Low barrier access can result in patients attending clinic appointments where they can continue to work with the interprofessional maternity care team towards their recovery-oriented goals and obtain prenatal and postnatal care.

Harm reduction also focuses on minimizing harm and promoting safety (Rutman et al., 2020). Specific care goals related to harm reduction should be decided upon between provider and patient. Harm reduction strategies and services that meet people wherever they are at in their substance use and recovery journey is another key component of care approaches that need to be adopted. The participants in the study shared their goals that they set with their care providers and how the providers were accepting of whatever big or small goal they set. A few examples included participants replacing cocaine for a lot of coffee, maintaining their opioid agonist therapy during pregnancy, admission to a detox clinic, reducing substance use or changing from a street substance to legalized cannabis, and engaging with peer supports that shared their vision towards recovery.

Culturally Grounded Care and Approaches

Health care models that integrate cultural programming and incorporate cultural safety into their care approaches is critical for patients (Denison et al., 2013; Truth & Reconciliation Commission of Canada, 2015). The concept of cultural safety accounts for the social and historical contexts of health and health care inequities, as well as structural and interpersonal power imbalances that shape health care experiences (Ward et al., 2019; Wright et al., 2020). Culturally competent and safe care provision means upholding dignity, valuing differences, being inclusive and maintaining equity (Government of Canada, 2021). During the semi-structured interviews participants were asked about their experience with cultural safety. The participants all reported that they did not have concerns with cultural safety but offered ideas to improve the system to incorporate of cultural programming. Participants desired an increased awareness of the existing services such as the ceremony room and inclusion of an Indigenous Elder or Grandmother on the healthcare team.

Research shows that Indigenous mothers and infants in Canada globally experience racist and discriminatory care, poorer access to health care and outcomes that stem from social inequities in comparison to non-Indigenous people (Truth & Reconciliation Commission of Canada, 2015). Culturally safe care approaches for Indigenous pregnant individuals in Canada have been explored and researchers have suggested that provider implicit bias and racism needs to be addressed (Ward et al., 2019). Cultural safety approaches have also acknowledged and addressed the roots of health and health care inequities (Ward et al., 2019). Culturally grounded care approaches for Indigenous childrearing and childbearing families is fundamental to the health and well-being of individuals (Shahram et al., 2017; The Truth & Reconciliation Commission of Canada, 2015). Cultural competence, inclusions of Indigenous cultural

programming (i.e., smudging, drumming, gardens), and the acknowledgement of the multigenerational impacts of colonization are essential to provide wraparound and culturally safe best practice care for pregnant individuals who use substances (Rutman et al., 2020). Best practice approaches that incorporate and honor the patient perception of safe, compassionate, dignified, and connected care is aligned with culturally safe care.

Wraparound programs that engaged Indigenous Elders promoted pregnant individuals who use substances (re)connection to traditional knowledge and teachings; this was identified in our qualitative research as an area for growth (Rutman et al. 2020). The wraparound approaches provided in many of the Canadian community programs for pregnant individuals that use substances has parallels with the holistic health philosophies found in Indigenous societies (Rutman et al., 2020).

Culturally grounded care made a difference to retention in the programs; it was noted that sites that provided an infant welcoming ceremony and crafting opportunities with the Indigenous Elders influenced retention in the programs (Rutman et al., 2020b). These services are not offered at the interprofessional maternity care clinic and are optimal ideas in response to the participants request for further integration of cultural programming. Incorporating culturally grounded care has the potential to stimulate adaptations to existing care services and make care compatible with individuals (Lauricella et al., 2016).

Education and Training

Pregnant individuals who use substances have reported feeling more comfortable when providers are nonjudgmental and empathic (Renberger et al., 2020; Rutman et al., 2020). Providers that offer treatment versus a punitive approach are rendered to be more approachable (Renberger et al, 2020). Education for care providers on best practice and care approaches are a

necessity. The practical suggestions from the participants to offer safe, dignified, compassionate, and connected care (see Table 1) should be reviewed by providers who interact with pregnant individuals who use substances. Additionally, training on implicit bias, systemic racism and discrimination is essential for providers (Cooper et al., 2022). The training can be done through educational experiences such as simulation participation, attending webinars, completing online open access modules, reading educational material on this topic, listening to patient stories, and testing one's implicit biases through validated surveys. Participating in simulation has been reported as a beneficial way to integrate and reflect on care approaches (Vora et al., 2021). Another way for providers to gain experience in overcoming stigmatizing and biased approaches is to participate in forum theatre (Rizk, 2020). Forum theatre has successfully been used for providers to gain empathy and patient perspective during the exercise (O'Connor et al. 2023; Rizk, 2020. Examples of select resources that can be accessed by obstetrical and maternal mental health care providers to enhance trauma-informed care, harm-reduction, culturally-grounded care, and obstetrical care with pregnant individuals who use substances are listed in Table 2.

Table 2: Examples of Canadian Care Resources Related to Substance Use, Trauma Informed care and Harm Reduction for Professionals and Families

Education Resource	**Organization**	**Contents of Resource**
Trauma Informed Care		
Trauma and violence informed care: A tool for health and social service organizations and providers (Equip, 2021)	Equip Health Care (University of British Columbia, University of Victoria, University of Northern BC, Western University)	Provides clear, practical steps you can take to build trauma and violence informed care into practice and organization. Overview of 4 principles: 1)build awareness and understanding; 2) emphasize safety and trust; 3) offer authentic choices through connection and collaboration & 4)find and build on people's strengths.
Trauma Informed Practice Guide (Arthur et al., 2013)	BC Centre of Excellence in Women's Health	Overview of Trauma, Understanding Trauma, Trauma Informed Approaches, and Implement Trauma Informed Approaches. Developed for 3 settings: Women's residential

		substance use treatment program, community base services and inpatient psychiatric hospital unit.
Trauma-informed: A resource for service organizations and providers to deliver services that are trauma-informed (Klinic, 2013)	Klinic community Health Center Winnipeg, Manitoba	What is Trauma? Trauma Informed Practices, Post-Traumatic Stress Disorder, Types of Trauma, Historic Trauma, The Legacy of residential School, Cultural Teaching/Healing Practice, The Prevalence, Effects and Neurobiology of Trauma.
Harm Reduction		
Harm Reduction and Pregnancy: Community – based approaches to Prenatal Substance use in Western Canada (Nathoo et al., 2015)	University of Victoria & BC Centre of Excellence for Women's Health	Overview of Harm-reduction and program outcomes related to same. Provides examples from Western Canadian Community-based programs.
Culturally Grounded Care		
Achieving Cultural Competence: A diversity tool kit for residential care settings	Ministry of Children and Youth Services Ontario (Lam & Cipparrone, 2008)	Common misconceptions about diversity. Benefits of Culturally Competent and Guiding Principles along with a 10 points plan for Organizational Change.
Our Sacred Journey: Aboriginal Pregnancy Passport (Perinatal Services BC, nd).	Perinatal Services BC	Traditional Teachings, Creating Harmony and balance, Early, mid, and late pregnancy and postpartum decisions and expectations. Aboriginal resources for Pregnancy and Postpartum.
Giving Birth in a New Land (Best Start, 2016).	Best Start Ontario	Getting help, finding the health care you need during pregnancy, getting ready for your baby, having you r baby and important services during pregnancy and after your baby is born.
Pregnancy, Parenting and Substance Use		
Mothering and Opioids: Addressing Stigma-Acting Collaboratively Toolkit (Schmidt	Centre of Excellence for Women's Health	Toolkit include content on: Addressing Stigma in Practice, Improving Programs and Services, Cross System Collaboration and Joint Action and Policy Values. Provides scenarios along with reflection questions. Includes a worksheet on values-based approaches in

et al., 2019)		the workplace.
University of British Columbia: Perinatal Substance Use (2021)	University of British Columbia, Continuing Professional Development	4 modules (6 hours of content) Principles of Care, 2. Care during pregnancy and labour, 3. Care of the newborn exposed to substances during pregnancy and four. Discharge planning and transition to community.

Knowledge Translation & Dissemination of Findings

The Canadian Institute of Health Research (CIHR) *Knowledge to Action Process* guided our plans to raise user awareness of our research findings and facilitate the use of findings into practice (CIHR, 2016). As part of knowledge synthesis, we conducted a scoping review on interprofessional care models for pregnant individuals who use substances. We determined that the scoping review was necessary to have further depth and understanding related to interprofessional care models and approaches and this contributed to the larger knowledge on the topic.

Study findings have been disseminated in multiple ways and will continue to be disseminated. Chapter 2 and 3 have been submitted for publication in peer reviewed journals. And Chapter 4 (findings paper) will be submitted to a peer-reviewed health journal. Study results (scoping review and preliminary findings from the qualitative study) have been presented at national and international health care conferences, and locally to the interprofessional maternal child health care team and clinic. The scoping review study results were presented at the annual Helen Glass Research Symposium for the College of Nursing at the University of Manitoba. Poster presentations were presented at the 2023 American College of Nurse Midwives 68th Annual Meeting and Exhibition. Locally and at the Manitoba Midwifery monthly rounds. The research findings will also be shared with an Alberta research group (The Alberta Neonatal Abstinence Syndrome Mother-Baby Care ImprovEmeNT (NASCENT) Program: A stepped wedge cluster randomized trial of a hospital-level Neonatal Abstinence Syndrome intervention

and with lead experts from the Families in Recovery Program at BC Women's hospital. Use of social media (i.e., Twitter) and social academic networks (i.e., ResearchGate, ORCID) to promote publications will be used by the principal investigator and committee members. The results from the thematic analysis have been graphically designed by a professional graphic recorder (see Appendix N). The purpose was to provide a visual element to share beyond the written or spoken word.

The framework's *action cycle* is on-going as we continue to make plans to move the knowledge gained from the thesis research into the clinical practice setting. Knowledge exchange has occurred between the researchers and clinic providers resulting in mutual learning and changes in practice. The care providers at the clinic participated in several steps from the appreciative inquiry phase. During data analysis they reviewed the data and provided verbal and written memos. During the last stage of appreciative inquiry as research method they reviewed all the themes and recommendation and provided a written reflection on their practice and integration of the study findings.

Sustaining and Planning for an Interprofessional Perinatal Care Team

Best practice care approaches for individuals who use substances should include strategies for constructing and sustaining an interprofessional care team (Ecker et al., 2019; Gulbransen et al., 2022; Krans et al., 2018; Raffie et al., 2021; Rutman et al., 2020). The interprofessional care team must create a culture of care that prioritizes safe, compassionate, dignified, and connected care. Steps to make this happen may require further education and training for health care providers (Morrison et al., 2020; Seybold et al., 2014). In addition to having increased obstetrical providers prescribing opioid antagonist therapy (College of

Physicians & Surgeons of Manitoba, 2023) there needs to be broad scale education and training will all staff on how to effectively engage in care with pregnant individuals who use substances.

Strengths and Limitations

The aim of the thesis was met as we were able to critically examine interprofessional maternity care models for pregnant individuals who use substances, and garner patient perspectives. Chapters 2, 3, and 4 outline the strengths and limitations of the scoping review, appreciative inquiry method, and qualitative study findings. I offer further reflection on the strengths and limitations.

The participants in our qualitative study described the nuanced ways that the care approaches happened when they engaged with an interprofessional maternity care team. They provided a comprehensive list of care provider characteristics and coinciding actionable ways to encompass compassionate, dignified, and connected care. These descriptions provide insight for care providers to consider when caring for pregnant individuals who use substances. For example, expediting a patient into detox (harm reduction), having the midwife and obstetrician discuss a plan of care together, the clinic providers doing their own patients lab work and sharing results in a timely manner, being present for the delivery (continuity of care), or honoring their natural supports such as the Grandmothers or Aunties advice. The qualitative research findings have provided actionable and specific ways to provide quality care for pregnant individuals that use substances. The research opened spaces to hear the voices of the patients which is a significant strength of the thesis research. Health research tends to be biomedically focused and privileges the provider's position for care approaches. This research privileged the patient voice which gave insight to how the recipient of care defined safe care. The use of qualitative methods for substance related research is commended as this research approach has recognized the

importance of patient and provider perspectives to improve the health care system (Almarsdottir & Rahmner, 2016). Based on reflective memos and participant comments the research process had a positive impact on the participants as they were empowered to share their stories. What they offered mattered and providers from the clinic were able to absorb and change some practices immediately. The advocacy work for best practice for pregnant individuals continues in effort to sustain and further develop interprofessional maternity care clinics.

The qualitative research took place in one clinic setting and we are aware that each health care system or site has unique contexts (policies, health authorities, physical location, providers etc.). We hope that some of the findings from this study can be transferred to other contexts or settings where care is provided to pregnant individuals who use substances. The strength of qualitative research is that if read, absorbed, and reflected on it will have an impact on provider practice and patient experience with the health care system (Almarsdottir & Rahmner, 2016).

Choosing the "right" research method in research can be challenging; using appreciative inquiry required researcher training and consultation with experts in the field. The positive focus in appreciative inquiry does not negate the negative but runs the possibility of missing some of the areas that would be identified if asked for in a different way. We determine that we were working on the assumption that building on existing strengths rather than focusing on the weaknesses was the best approach. Despite our systematic approach to the systematic review there is the possibility that the review might have missed some relevant studies (Pham et al., 2014).

The landscape of substance policy is everchanging and the health care system continues to adapt to provide care. The nuances of the care approaches will need to be continually

reassessed and additional research to further delineate the roles and responsibility of an interprofessional care team is required.

Conclusion

The evidence generated from this thesis work furthered our understanding on why the interprofessional care approach is best practice for pregnant individuals that use substances. The findings identified important aspects of having an interprofessional care teams beyond the physical co-location of services. Action to make the interprofessional maternity care team sustainable and replicable is urgently needed. This thesis advances knowledge on the importance of interprofessional care models and provider approaches. The most important knowledge learned from this thesis work is the contribution of appreciative inquiry as a research method in health research to amplify the patient voice when examining care models. And finally, to incorporate what we learn from patients into new care approaches that support safe, dignified, and compassionate care.

References

Almarsdóttir, A. B., & Rahmner, P. B. (2016). Qualitative methods in drug utilization research. In *Drug Utilization Research* (pp. 139–149). John Wiley & Sons, Ltd.

Bright, T., Felix, L., Kuper, H., & Polack, S. (2017). A systematic review of strategies to increase access to health services among children in low and middle income countries. *BMC Health Services Research*, *17*(1), 252. https://doi.org/10.1186/s12913-017-2180-9

By, Menschner, C., & Maul, A. (n.d.). *Key ingredients for successful trauma-informed care implementation*. Samhsa.gov. Retrieved June 2, 2023, from https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf

Campbell, J. C., & Bunting, S. (1991). Voices and paradigms: Perspectives on critical and feminist theory in nursing. *ANS. Advances in Nursing Science*, *13*(3), 1–15. https://doi.org/10.1097/00012272-199103000-00004

Canadian Institutes of Health Research. (2016). *Guide to knowledge translation planning at CIHR: Integrated and end-of-grant approaches*. Cihr-Irsc.Gc.Ca. https://cihr-irsc.gc.ca/e/45321.html

Churchill, M. E., Smylie, J. K., Wolfe, S. H., Bourgeois, C., Moeller, H., & Firestone, M. (2020). Conceptualising cultural safety at an Indigenous-focused midwifery practice in Toronto, Canada: qualitative interviews with Indigenous and non-Indigenous clients. *BMJ Open*, *10*(9), e038168. https://doi.org/10.1136/bmjopen-2020-038168

Clancy, G., Boardman, F., & Rees, S. (2022). Exploring trust in (bio)medical and experiential knowledge of birth: The perspectives of pregnant women, new mothers, and maternity care providers. *Midwifery*, *107*(103272), 103272. https://doi.org/10.1016/j.midw.2022.103272

College of Physicians and Surgeons Manitoba. (2023). *1.9 recommendations for the treatment of opioid use disorder in pregnancy*. Cpsm.Mb.Ca. https://cpsm.mb.ca/assets/PrescribingPracticesProgram/Recommendations%20for%20Treatment%20of%20OUD%20in%20Pregnancy.pdf

College of Physicians and Surgeons of Manitoba. (2023). *1.9 recommendations for the treatment of opioid use disorder in pregnancy*. Cpsm.Mb.Ca. https://cpsm.mb.ca/assets/PrescribingPracticesProgram/Recommendations%20for%20Treatment%20of%20OUD%20in%20Pregnancy.pdf?utm_source=web&utm_medium=direct&utm_campaign=OATmanual

Cooper, L. A., Saha, S., & van Ryn, M. (2022). Mandated implicit bias training for health professionals-A step toward equity in health care. *JAMA Health Forum*, *3*(8), e223250. https://doi.org/10.1001/jamahealthforum.2022.3250

Denison, J., Varcoe, C., & Browne, A. J. (2014). Aboriginal women's experiences of accessing health care when state apprehension of children is being threatened. *Journal of Advanced Nursing*, *70*(5), 1105–1116. https://doi.org/10.1111/jan.12271

Dombrowski, J. C., Halliday, S., Tsui, J. I., Rao, D., Sherr, K., Ramchandani, M. S., Emerson, R., Fleming, M., Wood, T., & Chwastiak, L. (2023). Adaptation of the collaborative care

model to integrate behavioral health care into a low-barrier HIV clinic. *Implementation Research and Practice*, *4*, 263348952311671. https://doi.org/10.1177/26334895231167105

Doyle, C., Lennox, L., & Bell, D. (2013). A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. *BMJ Open*, *3*(1), e001570. https://doi.org/10.1136/bmjopen-2012-001570

Ecker, J., Abuhamad, A., Hill, W., Bailit, J., Bateman, B. T., Berghella, V., Blake-Lamb, T., Guille, C., Landau, R., Minkoff, H., Prabhu, M., Rosenthal, E., Terplan, M., Wright, T. E., & Yonkers, K. A. (2019). Substance use disorders in pregnancy: clinical, ethical, and research imperatives of the opioid epidemic: a report of a joint workshop of the Society for Maternal-Fetal Medicine, American College of Obstetricians and Gynecologists, and American Society of Addiction Medicine. *American Journal of Obstetrics and Gynecology*, *221*(1), B5–B28. https://doi.org/10.1016/j.ajog.2019.03.022

Farre, A., & Rapley, T. (2017). The new old (and old new) medical model: Four decades navigating the biomedical and psychosocial understandings of health and illness. *Healthcare (Basel, Switzerland)*, *5*(4). https://doi.org/10.3390/healthcare5040088

Gemmill, A., Kiang, M. V., & Alexander, M. J. (2019). Trends in pregnancy-associated mortality involving opioids in the United States, 2007-2016. *American Journal of Obstetrics and Gynecology*, *220*(1), 115–116. https://doi.org/10.1016/j.ajog.2018.09.028

Gulbransen, K., Thiessen, K., Pidutti, J., Watson, H., & Winkler, J. (2022). Scoping review of best practice guidelines for care in the labor and birth setting of pregnant women who use

methamphetamines. *Journal of Obstetric, Gynecologic, and Neonatal Nursing : JOGNN*, *51*(2), 141–152. https://doi.org/10.1016/j.jogn.2021.10.008

Healthcare Excellence. (2021). *Healthcare Excellence Canada: About us*. Healthcareexcellence.Ca. https://www.healthcareexcellence.ca/en/about/about-us/

Heaman, M. I., Martens, P. J., Brownell, M. D., Chartier, M. J., Thiessen, K. R., Derksen, S. A., & Helewa, M. E. (2018). Inequities in utilization of prenatal care: a population-based study in the Canadian province of Manitoba. *BMC Pregnancy and Childbirth*, *18*(1). https://doi.org/10.1186/s12884-018-2061-1

Holt, K., & French, G. (2020). Exploring the motherhood experiences of active methamphetamine users. *Crime, Law, and Social Change*, *73*(3), 297–314. https://doi.org/10.1007/s10611-019-09862-5

Jones, C., Duea, S., Griggs, K., Johnstone, W., Jr, & Kinsey, D. (2021). Improving outcomes of mothers with Opioid Use Disorder using a community collaborative model. *Journal of Primary Care & Community Health*, *12*, 215013272110524. https://doi.org/10.1177/21501327211052401

Jones, H. E., Deppen, K., Hudak, M. L., Leffert, L., McClelland, C., Sahin, L., Starer, J., Terplan, M., Thorp, J. M., Jr, Walsh, J., & Creanga, A. A. (2014). Clinical care for opioid-using pregnant and postpartum women: the role of obstetric providers. *American Journal of Obstetrics and Gynecology*, *210*(4), 302–310. https://doi.org/10.1016/j.ajog.2013.10.010

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *The European Journal of General Practice*, *24*(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Kramlich, D., Kronk, R., Marcellus, L., Colbert, A., & Jakub, K. (2018). Rural postpartum women with substance use disorders. *Qualitative Health Research*, *28*(9), 1449–1461. https://doi.org/10.1177/1049732318765720

Krans, E. E., Campopiano, M., Cleveland, L. M., Goodman, D., Kilday, D., Kendig, S., Leffert, L. R., Main, E. K., Mitchell, K. T., O'Gurek, D. T., D'Oria, R., McDaniel, D., & Terplan, M. (2019). National partnership for maternal safety: Consensus bundle on obstetric care for women with opioid use disorder. *Obstetrics and Gynecology*, *134*(2), 365–375. https://doi.org/10.1097/aog.0000000000003381

Lauricella, M., Valdez, J. K., Okamoto, S. K., Helm, S., & Zaremba, C. (2016). Culturally grounded prevention for minority youth populations: A systematic review of the literature. *The Journal of Primary Prevention*, *37*(1), 11–32. https://doi.org/10.1007/s10935-015-0414-3

Marchand, K., Beaumont, S., Westfall, J., MacDonald, S., Harrison, S., Marsh, D. C., Schechter, M. T., & Oviedo-Joekes, E. (2019). Conceptualizing patient-centered care for substance use disorder treatment: findings from a systematic scoping review. *Substance Abuse Treatment, Prevention, and Policy*, *14*(1). https://doi.org/10.1186/s13011-019-0227-0

Mate, G. (2013). *In the realm of hungry ghosts: Close encounters with addiction*. Random House.

McGeough, C., Walsh, A., & Clyne, B. (2020). Barriers and facilitators perceived by women while homeless and pregnant in accessing antenatal and or postnatal healthcare: A qualitative evidence synthesis. *Health & Social Care in the Community*, *28*(5), 1380–1393. https://doi.org/10.1111/hsc.12972

Morgan, L., Carson, G., Gagnon, A., & Blake, J. (2014). Collaborative practice among obstetricians, family physicians and midwives. *Journal de l'Association Medicale Canadienne [Canadian Medical Association Journal]*, *186*(17), 1279–1280. https://doi.org/10.1503/cmaj.140537

Ordean, A., & Kahan, M. (2011). Comprehensive treatment program for pregnant substance users in a family medicine clinic. *Canadian Family Physician Medecin de Famille Canadien*, *57*(11), e430–e435.

Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research Synthesis Methods*, *5*(4), 371–385. https://doi.org/10.1002/jrsm.1123

Phillips-Beck, W., Eni, R., Lavoie, J. G., Avery Kinew, K., Kyoon Achan, G., & Katz, A. (2020). Confronting racism within the Canadian healthcare system: Systemic exclusion of first nations from quality and consistent care. *International Journal of Environmental Research and Public Health*, *17*(22), 8343. https://doi.org/10.3390/ijerph17228343

Renbarger, K. M., Shieh, C., Moorman, M., Latham-Mintus, K., & Draucker, C. (2020). Health care encounters of pregnant and postpartum women with substance use

disorders. *Western Journal of Nursing Research*, *42*(8), 612–628. https://doi.org/10.1177/0193945919893372

Rutman, D., Hubberstey, C., Poole, N., Schmidt, R. A., & Van Bibber, M. (2020). Multi-service prevention programs for pregnant and parenting women with substance use and multiple vulnerabilities: Program structure and clients' perspectives on wraparound programming. *BMC Pregnancy and Childbirth*, *20*(1). https://doi.org/10.1186/s12884-020-03109-1

Seybold, D., Calhoun, B., Burgess, D., Lewis, T., Gilbert, K., & Casto, A. (2014). Evaluation of a training to reduce provider bias toward pregnant patients with Substance Abuse. *Journal of Social Work Practice in the Addictions*, *14*(3), 239–249. https://doi.org/10.1080/1533256X.2014.933730

Truth and Reconciliation Commission of Canada : calls to action.: IR4-8/2015E-PDF - Government of Canada Publications - Canada.ca. (2015). Publications.Gc.Ca. https://publications.gc.ca/site/eng/9.801236/publication.html

University of British Columbia. (2021). *Substance Use and Addiction Education*. Ubc.Ca. https://health.ubc.ca/collaborative-health-education/substance-use-and-addiction-education

Viveiros, C. J., & Darling, E. K. (2018). Barriers and facilitators of accessing perinatal mental health services: The perspectives of women receiving continuity of care midwifery. *Midwifery*, *65*, 8–15. https://doi.org/10.1016/j.midw.2018.06.018

Williams, D. R., & Wyatt, R. (2015). Racial bias in health care and health: Challenges and opportunities: Challenges and opportunities. *JAMA: The Journal of the American Medical Association*, *314*(6), 555–556. https://doi.org/10.1001/jama.2015.9260

Windsor, L. C., & Murugan, V. (2012). From the individual to the community: Perspectives about substance abuse services. *Journal of Social Work Practice in the Addictions*, *12*(4), 412–433. https://doi.org/10.1080/1533256X.2012.728115

Workplace Health and Safety Queensland. (2013). *Understanding safety culture*. Gov.au. https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0024/19365/understanding-safety-culture.pdf

World Health Assembly. (2019). *Global action on patient safety*. Who.int. https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_R6-en.pdf?ua=1)

World Health Organization. (2019). *Patient safety*. Who.int. https://www.who.int/news-room/fact-sheets/detail/patient-safety

Appendix A – Sample search strategies

The following is the CINAHL Data Base Searches

Monday, July 18, 2022, 6:14:14 PM

#	Query	Limiters/Expanders	Last Run Via	Results
S12	S3 AND S6 AND S10	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	185
S11	S3 AND S6 AND S10	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	185
S10	S7 OR S8 OR S9	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	224,192
S9	“Substance use” OR “Substance misuse” OR “Substance abuse” OR “Drug Use” OR “Drug Misuse” OR “Drug Abuse” OR “Illicit Substance*” OR “Illicit Drug*” OR “Street Drugs” OR addict* OR “People who use	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search	137,407

	drugs”		Database - CINAHL with Full Text	
S8	(MH "Street Drugs")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	5,457
S7	(MH "Substance Use Disorders+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	179,510
S6	S4 OR S5	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	389,652
S5	Perinatal OR Pregnancy OR Childbearing OR Childrearing OR "Expectant Mothers" OR Prenatal OR "Labor and Delivery" OR "Labour and Delivery" OR obstetric* OR Birth OR Childbirth OR "Early-parenting" OR Postpartum OR "Post-partum"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	383,563

S4	(MH "Maternal-Child Care+") OR (MH "Expectant Mothers") OR (MH "Expectant Fathers")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	72,035
S3	S1 OR S2	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	100,468
S2	interprofessional OR "inter-professional" OR interdisciplinary OR "inter-disciplinary" OR multiservice OR co-location OR wraparound OR "collaborative care" OR "comprehensive care "	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	61,461
S1	(MH "Multidisciplinary Care Team")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Basic Search Database - CINAHL with Full Text	49,202

The following is the PsycINFO Search:

APA PsycINFO <1806 to July Week 2 2022>

#	Query	Results from 18 Jul 2022
1	(interprofessional or 'inter-professional' or interdisciplinary or 'inter-disciplinary' or multiservice or wraparound or co-location or 'collaborative care' or 'comprehensive care').mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	47,695
2	(((((perinatal or pregnancy or childbearing or childrearing or expectant mothers or expectant father or prenatal or 'labor) and delivery') or 'labour) and delivery') or obstetric* or birth or childbirth or 'early-parenting' or postpartum).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	94,017
3	('substance use' or 'substance abuse' or 'substance misuse' or 'drug use' or 'drug misuse' or 'drug abuse' or 'illicit substance use' or illicit substance misuse' or 'illicit substance abuse' or 'street drugs' or addict*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	183,988
4	1 and 2 and 3	79

(interprofessional or 'inter-professional' or interdisciplinary or 'inter-disciplinary' or multiservice or wraparound or co-location or 'collaborative care' or 'comprehensive care').mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]

(((((perinatal or pregnancy or childbearing or childrearing or expectant mothers or expectant father or prenatal or 'labor) and delivery') or 'labour) and delivery') or obstetric* or birth or childbirth or 'early-parenting' or postpartum).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]

('substance use' or 'substance abuse' or 'substance misuse' or 'drug use' or 'drug misuse' or 'drug abuse' or 'illicit substance use' or illicit substance misuse' or 'illicit substance abuse' or 'street

drugs' or addict*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]

1 and 2 and 3

Appendix B – PRISMA-ScR Checklist

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	In title (p.1)
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	Complete: Refer to Abstract
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	Complete: Refer to Background
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	Complete: last Paragraph in Background Section
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	Yes – referenced and published in Open Science Framework
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	Complete – refer to Study Selection Criteria Section
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	Complete – refer to Data Sources and Searches Section
Search	8	Present the full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Complete – See Appendix A

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	Complete – refer to Data Sources and Searches Section
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	Used Covidence – See Appendix C of thesis
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	Complete – refer to background
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	NA
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	Used Covidence
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	645 resources reviewed after deduplication
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	Complete – refer to Tables in Paper
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	NA
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	Complete – refer to Tables and Narrative Summary in Paper
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	Complete – refer to Tables and Narrative Summary in Paper

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	Complete – refer to Discussion in Paper
Limitations	20	Discuss the limitations of the scoping review process.	Complete – refer to Gaps in the Literature
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	Complete – refer to Discussion and Conclusion
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	NA

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.
* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.
† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).
‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.
§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.

Appendix C – Data extraction form from Covidence

Full Text Extraction Report

Overview

Year Published

Author(s)

Author

Country of Origin

1. United States
2. Canada
3. Australia
4. United Kingdom
5. Sweden
6. Other

If other:



Study Population

1. ☐ Prenatal
2. ☐ Birthing
3. ☐ Postpartum
4. ☐ Prenatal through Postpartum

Study Population

1. ☐ Opioid Use
2. ☐ Marijuana Use
3. ☐ Tobacco Use
4. ☐ Alcohol Use
5. ☐
6. ☐ General Substance Use

Publication Type

1. ☐ Systematic Review
2. ☐ Scoping Review
3. ☐ Mixed-Methods
4. ☐ RCT
5. ☐ Qualitative
6. ☐ Evaluation
7. ☐ Comparative
8. ☐ Editorial & Opinion
9. ☐ Report
10. ☐ Retrospective Study

Sample Size



Interprofessional Care Team

1. ☐ Obstetrician
2. ☐ Pediatrician
3. ☐ Midwife
4. ☐ Nurse (RN)
5. ☐ Nurse Practitioner
6. ☐ Social Worker
7. ☐ Peer Support
8. ☐ Dietician
9. ☐ Addictions Counsellor
10. ☐ Family General Physician
11. ☐ Psychiatry
12. ☐ Psychology
13. ☐ Lactation Consultant
14. ☐ Case Manager
15. ☐ Anesthesiology
16. ☐ Other

If other, please describe.

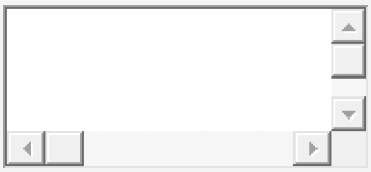


Care Provider Characteristics

1. ☐ Nonjudgmental
2. ☐ Shared Decision Making
3. ☐ Non Stigmatizing
4. ☐ Compassionate
5. ☐ Respect & Dignity
6. ☐ Relational
7. ☐ Trusting
8. ☐ Not Reported

9. ☐ Other

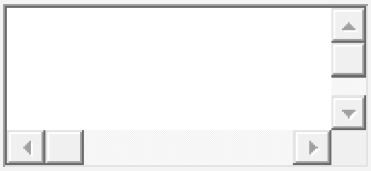
If other, please describe:



Care Model Characteristic

1. ☐ Wraparound
2. ☐ Co-location of Services
3. ☐ Trauma-Informed Approach
4. ☐ Harm Reduction
5. ☐ Cultural Care Considerations
6. ☐ Group Care for Patients
7. ☐ Interprofessional Team Approach
8. ☐ Partnerships with Outside Agencies
9. ☐ Continuity of Care from Prenatal through Postpartum
10. ☐ Other

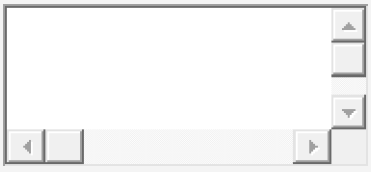
If other, please describe:



Program Outcomes Reported

1. ○ Yes
2. ○ No

Program Outcome Description:



Patient Outcomes Reported

1. ○ Yes

2. No

Patient Outcomes

Appendix D – Health Research Ethics Board Approval

University of Manitoba | Research Ethics and Compliance

Research Ethics Bannatyne
P126-770 Bannatyne Avenue
Winnipeg, MB R3E 0W3
T: 204 789 3255
F: 204 789 3414
bannreb@umanitoba.ca

HEALTH RESEARCH ETHICS BOARD (HREB)
CERTIFICATE OF FINAL APPROVAL FOR NEW STUDIES
Full Board Review

PRINCIPAL INVESTIGATOR:	INSTITUTION/DEPARTMENT:	ETHICS #:
Kristen Gulbransen	University of Manitoba and Shared Health/College of Nursing	HS25473 (H2022:146)
HREB MEETING DATE:	**APPROVAL DATE:**	**EXPIRY DATE:**
May 30, 2022	June 9, 2022	**May 30, 2023**
STUDENT PRINCIPAL INVESTIGATOR SUPERVISOR (If applicable):		
Dr. Kellie Thiessen		

PROTOCOL NUMBER:	PROJECT OR PROTOCOL TITLE:
	A novel care model: Maternity care experiences of pregnant persons who use substances
SPONSORING AGENCIES AND/OR COORDINATING GROUPS:	
University of Manitoba-Funds from Dr Wanda Phillips-Beck Indigenous Maternal Child Chair Award	

Submission Date(s) of Investigator Documents:	REB Receipt Date(s) of Documents:
March 30, 2022, May 5, 2022 (date in footer of letter) and June 2, 2022	March 30, 2022, May 11, 2022, and June 3, 2022

THE FOLLOWING ARE APPROVED FOR USE:

Document Name	Version (If applicable)	Date
Protocol: Revised Protocol (Including Appendices A-I) along with proposal as outlined in the revised University of Manitoba Bannatyne Campus Research Ethics Board Submission Form (submitted June 3, 2022) and Letter of Response dated June 2, 2022	V. 3	2-June-2022
Consent and Assent Form(s): PARTICIPANT INFORMATION AND CONSENT FORM: INTERVIEW	V. 3	3 JUNE 2022
COVID-19 Consent Appendix		March 2021
Other: NOTE to Cash Card as per wording in Letter of Response dated June 2, 2022.		

CERTIFICATION

The University of Manitoba (UM) Health Research Board (HREB) has reviewed the research study/project named on this ***Certificate of Final Approval*** at the ***full board meeting*** date noted above and was found to be acceptable on ethical grounds for research involving human participants. The study/project and documents listed above was granted final approval by the Chair or Acting Chair, UM HREB.

HREB ATTESTATION
The University of Manitoba (UM) Health Research Board (HREB) is organized and operates according to Health Canada/ICH Good Clinical Practices, Tri-Council Policy Statement 2, and the applicable laws and regulations of Manitoba. In respect to clinical trials, the HREB complies with the membership requirements for Research Ethics Boards defined in Division 5 of the Food and Drug Regulations of Canada and carries out its functions in a manner consistent with Good Clinical Practices.

QUALITY ASSURANCE
The University of Manitoba Research Quality Management Office may request to review research documentation from this research study/project to demonstrate compliance with this approved protocol and the University of Manitoba Policy on the Ethics of Research Involving Humans.

CONFLICT OF INTEREST
Any Principal or Co-Investigators of this study who are members of the UMHREB did not participate in the review or voting of this study.

CONDITIONS OF APPROVAL:
1. The study is acceptable on scientific and ethical grounds for the ethics of human use only. ***For logistics of performing the study, approval must be sought from the relevant institution(s).***
2. This research study/project is to be conducted by the local principal investigator listed on this certificate of approval.
3. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to the research study/project, and for ensuring that the authorized research is carried out according to governing law.
4. **This approval is valid until the expiry date noted on this certificate of approval. A Bannatyne Campus Annual Study Status Report** must be submitted to the REB within 15-30 days of this expiry date.
5. Any changes of the protocol (including recruitment procedures, etc.), informed consent form(s) or documents must be reported to the HREB for consideration in advance of implementation of such changes on the **Bannatyne Campus Research Amendment Form.**
6. Adverse events and unanticipated problems must be reported to the REB as per Bannatyne Campus Research Boards Standard Operating procedures.
7. The UM HREB must be notified regarding discontinuation or study/project closure on the **Bannatyne Campus Final Study Status Report.**

Sincerely,

[redacted]

John Arnett, PhD. C. Psych.
Chair, Health Research Ethics Board
Bannatyne Campus

Appendix E – Shared Health Approval



Shared Health Research and Innovation

July 15, 2022

SH ACPIAR #:
SH2022:063 Ethics
#: H2022:146

Project Title: A novel care model: Maternity care experiences of pregnant persons who

use substances Dear Kristen Gulbransen,

The Shared Health Approval Committee for Privacy, Impact and Access in Research has considered your request for the above project. Your request is approved for impact.

The following documents were reviewed during the assessment of this project. Note that any changes to documentation listed below will require re-review by this committee.

Document Name	**Version and/or Date**
Research Application	Signed 06-Apr-2022
Research Application – Amendment	Signed 25-Jun-2022
Protocol	2-June-2022
Consent Form	3 JUNE 2022
Interview Guides	30 March 2022
Screening Tool	30 March 2022

Approval is subject to the following stipulations:

1. Notification by Shared Health Research and Innovation, in writing, that the project may open for services as outlined in the protocol and/or supporting documentation.

2. Appropriate acknowledgement of Shared Health, the WRHA and/or affiliated organizations in any peer-reviewed publications resulting from this study is required.
3. For any results that may have an impact on the health system, a summary of the final results for the study must be submitted to Shared Health Research and Innovation along with a copy of any peer-reviewed publications arising from the study.
4. For any results where Shared Health has contributed significant information, appropriate interpretation and/or privacy review may be required prior to publication. Shared Health Research and Innovation must receive notification, in writing to SHReserach@sharedhealthmb.ca, at least thirty (30) calendar days in advance for intended publication in learned journals or thesis presentations; and at least ten (10) calendar days prior notice is require for every poster or oral presentation unless otherwise mutually agreed between Shared Health Research and Innovation and Principal Investigator. If there is an agreement/contract with stipulations regarding these conditions, the conditions within the agreement/contract will prevail.
5. Shared Health Research and Innovation must receive notification, in writing, within thirty (30) calendar days of project closure and/or termination.

6. A fully executed contract/agreement must be in place prior to the initiation of any study related activities, if applicable.
7. A copy of the UofM FAAF form is submitted to Shared Health Research and Innovation upon submission to the UofM ORS.
8. All supplies required to provide the services outlined in the protocol and/or supporting documentation must be on hand prior to project initiation.
9. The annual REB approval and study status report is submitted to Shared Health Research and Innovation as it is received each year for the duration of the active study period.
10. All members of the research team have completed PHIA training, and will maintain this training, renewing it every 3 years from date of issue, as required.
11. For any confirmed breech to privacy, any costs incurred by Shared Health/WRHA for the investigation and/or ratification of the breech will be at the expense of the researcher.
12. Shared Health reserves to cancel and/or suspend services without notice based on availability to provide required services.
13. All current Public Health measures/restrictions must be adhered to, including entering all health care facilities and/or program spaces.

We look forward to working with you on your

project. Sincerely,



Laura Curtis on behalf of
Dr. Paul Beaudin, MSc-SLP, PhD
Director of Research and Innovation, Shared Health
Chair, Approval Committee for Privacy, Impact and Access in Research, WRHA & Shared Health

Appendix F – First Nations Health research Social Secretariat of Manitoba Approval Letter

FIRST NATIONS HEALTH AND SOCIAL SECRETARIAT OF MANITOBA

Kirsten Gulbransen
University of Manitoba

Dear Kirsten:

Re: A Novel Care Model: Maternity Care Experiences of Pregnant Persons Who Use Substances

Thank you for the submission of your application's conditions to the Health Information Research Governance Committee dated October 16, 2022.

Since 1998, the Assembly of Manitoba Chiefs (AMC) Chiefs-in-Assembly supported the mandate for the Health Information Research Governance Committee (HIRGC) as the First Nations research ethics board.

In 2019, the Manitoba Chiefs-in-Assembly revised the mandate for HIRGC to being:

- The gatekeeper of First Nations data at a regional level.
- The advisory body to offer guidance to research carried out on a regional basis, including reviewing applications from First Nations or academic researchers or consultants.
- The body to ensure that respectful research for and by First Nations is carried out according to these principles: (a) Free Prior Informed consent on a collective and individual basis; (b) First Nations OCAP principles that First Nations have Ownership, Control, Access, and Possession of their own data and information; (c) First Nations ethical standards, whether Cree, Dakota, Dene, Oji Cree or Anishinaabe; and (d) Benefits to First Nations.

HIRGC reviewed your submission and are pleased to offer approval at this time.

Please note, as a condition of our support, a project report is expected annually from the date of this letter until the completion of the project, in which a final report should be submitted to HIRGC. You will receive a reminder three months prior to the annual report date. In addition, any presentations or publications regarding this project must be sent for review to HRIGC prior to the event or publication.

If you have any questions or concerns, please contact HIRGC via email at hirgc@fnhssm.com

In the Spirit of Truth and Reconciliation,

FIRST NATIONS HEALTH AND SOCIAL SECRETARIAT OF MANITOBA

[redacted]
Doris Young
HIRGC Chair

HEAD OFFICE: Suite B103-1075 Portage Avenue, Winnipeg, MB, R3G 0R8
SUB OFFICE: Unit 74 – 630 Kernaghan Ave. Winnipeg, MB R2C 5G1 • Telephone: (204) 942-9400 Fax: (204) 946-9761

Appendix G – Informed Consent for Study Participants

PARTICIPANT INFORMATION AND CONSENT FORM: INTERVIEW

Title of Study: A novel care model: Maternity care experiences of pregnant persons who use substances

Principal Investigator and contact information:
Kristen Gulbransen, Doctoral Candidate
College of Nursing, Rady Faculty of Health Sciences
Co-Investigators:
Dr. Kellie Thiessen, Associate Professor, College of Nursing, University of Manitoba
Dr. Patricia Gregory, Adjunct Professor, College of Nursing, University of Manitoba
Dr. Wanda Phillips-Beck, Seven Generations Scholar Indigenous Research Chair in Nursing, First Nations Health and Social Secretariat of Manitoba NIL appointment, College of Nursing, University of Manitoba, Indigenous Scholar
Dr. Javier Mignone, Associate Professor, College of Community Health Sciences, University of Manitoba
Dr. Heather Watson, MD, Obstetrics and Gynecology, College of Medicine, University of Manitoba

Sponsor: N/A
Funder: PhD study (student scholarship funding) and Indigenous Research Chair in Nursing for Indigenous support services.

You are being asked to participate in a research study involving an individual interview. Please take your time to review this consent form and discuss any questions you may have with the study staff, your friends, family, or your care provider before you make your decision. This consent form may contain words that you do not understand. Please ask the study staff to explain any words or information that you do not clearly understand.

Purpose of this Study

The research study is being conducted to study patient perspectives on their care interactions at the Green Leaf Ambulatory Care Clinic. You are an expert in your experience and the purpose of this research is to hear from the population of patients who have used substances during their pregnancy. We want to understand how to best approach care in a safe, kind, and respectful way. When you share your experiences, it provides health care providers with the patients' perspective which is critical to improve care and educate providers. We are asking questions from a strength-based lens so we can strengthen the existing system, improve care experiences, and identify problems so that opportunities to make changes can be presented.

Participants Selection

You are being asked to participate in this study because you have received care at the ambulatory care clinic and identified that you used substances during your pregnancy. We want to hear about your experience with the care providers and health care system. We are inviting participants to participate in one interview during their pregnancy and/or following the birth of their baby. We will be asking questions that focus on the strengths of the Health Sciences Center, Women's

Ambulatory Care Clinic Green Leaf wing and identifying areas for improvement specifically for pregnant persons who have used substances.
A total of 15 prenatal and/or postpartum participants will be asked to participate in the study.

Study Procedures

- The method of data collection for this study will be an individual interview.
- Participation in the interview will take no more than 60 minutes. You can participate in the interview face to face or on Zoom based on your preference.
- There will be one person who will ask questions and facilitate the interview. Kristen Gulbransen will be the facilitator for all of the interviews.
- You will be asked to share your point of view, as a patient interacting with the health care system during your pregnancy and/or birth and postpartum period. One interview will be scheduled with Kristen Gulbransen during the prenatal period and/or one interview following the birth of your baby. If you participate in the prenatal interview, it is optional if you decide to participate in the postpartum interview. Kristen is one of the researchers who is not a care provider at the clinic but has worked in this area for years.
- We are aiming to recruit 15 prenatal and postpartum participants to participate in the study. We will be purposeful to ensure there is representation from both prenatal and postpartum participants.
- The session will be audio-taped and transcribed (typed out). Because we want to make sure we do not miss any important part of your interviews we wish to audio-record the interviews. The researcher, Kristen Gulbransen will transcribe (type out) the interviews. Your name and anything to identify who you are will be removed when the interview recording is typed out.
- The audiotapes will be stored in locked files before and after being transcribed. Tapes will be destroyed upon completion of the study (anticipated date for December 2023) and the transcriptions (typed out interviews) will be destroyed in seven years (December 2029).
- You will be asked if you would like to review your typed out interview(s); if so, we will make arrangements for you to review the interview and add or erase any parts.
- You will also be asked if you would like a copy of the research findings. We will make arrangements for you to receive a copy of the findings.

Risks & Discomforts

There are some potential risks to participating in this study, beyond the risks inherent in daily living. It is possible that talking about your health care experiences might be emotional, embarrassing, or stressful for you. Please note that you do not have to answer any question(s) that make you feel uncomfortable. If anything, emotional, embarrassing, or stressful occurs, please feel free to tell the interviewer. You may decide to stop, take a break, or continue the interview. During and following the interview, Kristen will check-in with you to see how you are experiencing the interview. At the end of the interview, Kristen will provide you with a brief summary of what you shared and ask you about the interview experience.

Hospital staff (emergency, addictions medicine, a care provider from the Health Sciences Center, Women's Ambulatory Care Clinic Green Leaf wing) will be available if you feel like there is anything that has come up for you during the individual interview. A list of online, phone and in person supports will be provided in case you would like to access any of them following the interview. We also have an Elder and Knowledge Keeper on call during the interviews for consultation or for you to reach out to as needed. The Elder/Knowledge Keepers phone number will be provided to all participants that self-identify as Indigenous.

Interviews on Zoom have minimal risks, we will be using UM Zoom and cannot guarantee complete privacy of the data collected this way. We encourage you to be in a private place. The researchers will take all efforts to keep your data safe by locking the meeting once it has started to ensure no new participants join, and we will prevent screen sharing. The researchers are following the University of Manitoba Zoom guidelines to take additional care for the minimal risks associated with using Zoom.

Benefits

Being interviewed may not help you directly, although sometimes participants may find it helpful to talk about and share their experiences. Information gained may help other people or family members who access the Health Sciences Center, Women's Ambulatory Care Clinic Green Leaf wing in the future.

Costs

If parking costs are incurred during the interview they will be covered. A light lunch and refreshment will also be provided for in person interviews.

Payment for participation

You will be provided with a $50.00 gift cash card immediately following participation in the interview(s). If your interview is on Zoom the cashcard will be emailed to you immediately. If you agree to data check the transcripts (typed out interviews) and provide feedback, you will be given another $25.00 gift cash card via email.

Confidentiality

We will do everything possible to keep your personal information private. Your name will not be used at all in the study records. A list of names and addresses (mail or email) of participants will be kept in a secure file so we can send you a typed-out version of the interview and/or summary of the results of the study if you choose. If the results of this study are presented in a meeting, or published, nobody will be able to tell that you were in the study. Please note that although you will not be identified as the speaker, your words may be used to highlight a specific point. The collection and access to personal information will be in compliance with provincial and federal privacy legislations.

The interviews will be typed out (transcribed) by myself (Kristen Gulbransen). Once the study is complete the audio recordings will be destroyed and typed out versions will be destroyed after 7 years. All personal information including names and consent forms will be kept secure in a locked cabinet in the long-term storage facility of the MCNHR seven years. All hard copies and electronic copies of study documents will be destroyed according to the University of Manitoba's policy about destruction of confidential material, in March 2028.

Personal identifiers will not be shared with anyone beyond myself (Kristen Gulbransen). If there are study participants that identify as First Nation, Inuit, or Metis we will be sharing the data analysis with the Heart and Minds Research Advisory Circle. The Heart and Minds Research Advisory Circle has representation from Knowledge Keepers and Elders that are experts with maternal childcare. The only time personal information may be shared by the research team is if it is required by law. For example, if we learn that you plan to hurt yourself, the law requires that we get help for you. The U of M research ethics board may need to check the study for quality assurance purposes. This group has a professional responsibility to protect your privacy and are not allowed to misuse your information.

We may wish to quote your words directly in reports and publications resulting from this. With regards to being quoted, please check yes or no for each of the following statements:

Researchers may publish documents that contain quotations by me under the following conditions:	
☐ Yes ☐ No	I agree to be quoted directly (my name is used).
☐ Yes ☐ No	I agree to be quoted directly if my name is not published (I remain anonymous).
☐ Yes ☐ No	I agree to be quoted directly if a made-up name (pseudonym) is used.

Voluntary Participation/Withdrawal from the Study

Your decision to take part in this study is optional. You may decide to take part, not to take part, or you can take part but change your mind at any time. Leaving the study will not affect any other healthcare or other services you are getting at this time or in the future. To withdraw from this study at any time for any reason, contact Kristen Gulbransen [redacted] or [redacted]

Questions

You are free to ask any questions that you may have about your participation in this study and your rights as a research participant. If any questions come up during or after the study, you can contact Kellie Thiessen at [redacted] or Kristen Gulbransen [redacted] Do not sign or verbally consent unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

If you have additional questions and concerns you can call The University of Manitoba Health Research Ethics Board at [redacted] or email [redacted] to inquire about your rights as a research participant.

Consent Signatures and/or Verbal Consent:

1. I have read all 5 pages of the consent form.
2. I have had a chance to ask questions and have received satisfactory answers to all of my questions.
3. I understand that by signing this consent form or providing verbal consenting I have not waived any of my legal rights as a participant in this study.
4. I understand that my records, which may include identifying information, may be reviewed by the research staff working with the Principal Investigator and the agencies and organizations listed in the Confidentiality section of this document.
5. I understand that I may withdraw from the study at any time and my data may be withdrawn prior to publication.
6. I understand I will be provided with a copy of the consent form for my records.
7. I agree to participate in the study.

Participant Signature: _____ Date _____

Participant printed name: _____

or Verbal Consent Obtained ☐

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given their consent

Printed Name: _____ Date _____

Signature: _____

Role in the study: _____

<u>Data Sharing, Checking and Research Findings</u>

1. Would you like to receive a copy of your typed out interview?
   Yes ☐ No ☐

   If yes, please provide your email or mailing address to review typed interview:

   Email: _____

   and/or

   Mailing Address: _____

2. Would you like to receive a copy of the research findings?

Yes ☐ No ☐

How would you like to receive the research findings? Email ☐ or Mail ☐

If yes, please provide your email or mailing address to receive a copy of the research findings:

Email: _____

and/or Mailing Address: _____

Appendix H – Semi Structured Interview Guide

INTERVIEW GUIDE FOR PRENATAL PATIENTS

I: Choose the Positive as Inquiry & II: Inquire into the exceptionally positive moments

We are going to discuss your prenatal care experiences. We are excited to hear your ideas on good and positive ways of care. The goal is to have you share ideas on the ideal care experiences.

III. Share the stories and the life-giving forces from your Prenatal Care

BEST EXPERIENCE: Tell me about a time that you have had a really good or positive care experience at the Women's Ambulatory Care Clinic – Green Leaf wing? What made it a really good care experience? Who was involved?

VALUES:

Has there been anything that stands out the most for you during your prenatal care at the clinic?

What is the single most important thing to you during your prenatal care? Do you have any examples of how you experienced this at the clinic?

Probes:

I am going to ask you questions about trust & safety next.
Have you felt a sense of trust with your care provider at the clinic? Can you describe what it looked or felt like?
Have you felt a sense of safety with your care provider at the clinic? Can you describe what it looked or felt like?

Next, I am going to ask you questions about respect & dignity.
Have you felt respected during your prenatal care? Can you describe what it looked or felt like?
Have you felt valued (treated fairly) during your prenatal care? Can you describe what it looked or felt like?
Do you feel like you had individualized care during your prenatal care? Can you describe what it looked or felt like?
Do you feel like you were working together with your care providers to make decisions during your prenatal care? Can you describe what it looked or felt like?

I am going to ask you questions about compassionate care next.
Did you experience compassion, concern, kindness during your prenatal care? Can you describe what it looked or felt like?

What are three wishes you would make to have the best prenatal experience?

IV: Create shared images of a preferred future

Prenatal

Please describe to me what your dream experience during pregnancy would look like when interacting with care providers?

Probes:

- How would you describe the best clinic setting?
- How would you describe the best health care provider during your pregnancy?

Birth

- Please describe to me what your best experience during birth would look like?
- How would you describe the best birth setting?
- How would you describe the best health care provider during the birthing experience?

Postpartum

- Please describe to me what your best experience during postpartum care would look like?
- How would you describe the best postpartum setting? (will ask about both acute care postpartum and clinic postpartum)
- How would you describe the best health care provider during the postpartum experience?

V. Innovate and improvise

- From your perspective what three wishes would you have to make the prenatal experience the best?
- From your perspective what three wishes would you have to make the birth experience the best?
- From your perspective what three wishes would you have to make the birth experience the best?

Interviewer will provide verbal summary of interview and ask patient if they would like to offer any further comments.

Patients will also be asked about interview process and use of a strengths-based interview approach. Question: The questions asked today were strength-based. Tell me about your experience with questions from this point of view.

Ask if patients are interested in reviewing a copy of the typed interview (transcript) to review, edit and add anything. No personal identifiers will be on the typed transcript. If yes, interviewer (Kristen Gulbransen) will ask for personal email or mailing address.

INTERVIEW GUIDE FOR POSTPARTUM PATIENTS

Demographics:
Please answer only as you feel comfortable:
Which gender do you identify with most?
How do you identify your ethnicity?
Do you identify as First Nation? Metis? Inuit?
What is your age in years?
How many living children do you have?
How many pregnancies have you had?

I: Choose the Positive as Inquiry & II: Inquire into the exceptionally positive moments

We are going to discuss your birth and postpartum care experiences. Birth experiences refer to the time your labour started until your baby was born. Postpartum care will be considered the time following delivery until now. We are excited to hear your ideas on good and positive ways of care. The goal is to have you share ideas on the ideal care experiences. We understand that birth and postpartum are very personal experiences. Please share only what you are comfortable with.

III. Share the stories and the life-giving forces from your Birth Care

BEST EXPERIENCE: Tell me about any moments that you had a really good or positive care experience during your birth experience? What made it a really good care experience? Who was involved?

VALUES:

Was there anything that stood out the most for you during your birth experience?

What is the single most important thing to you during your birth? Do you have any examples of how you experienced this?

Probes:

In relation to your birth experience. I am going to ask you questions about trust & safety next.

Did you feel a sense of trust with your care provider(s)? Can you describe what it looked or felt like?

Did you feel a sense of safety with your care provider(s)? Can you describe what it looked or felt like?

Next, I am going to ask you questions about respect & dignity. Again, in relation to your birth experience.
Did you feel respected during the birth of your baby? Can you describe what it looked or felt like?
Did you feel valued (treated fairly) during of your baby? Can you describe what it looked or felt like?
Did you feel like you had individualized care during your birth? Can you describe what it looked or felt like?
Did you feel like you were working together with your care providers to make decisions during your birthing experience? Can you describe what it looked or felt like?

I am going to ask you questions about compassionate care next.
Did you experience compassion, concern, kindness during the birth of your baby? Can you describe what it looked or felt like?

What are three wishes you would make to have the best birthing experience?

IV: Create shared images of a preferred future

Birth

- Now that you have birthed your baby, how would you describe the best birth setting?
- Now that you have birthed your baby, how would you describe the best health care provider during the birthing experience?

Postpartum

- Please describe to me what your best experience during postpartum care looked like?
- How would you describe the best postpartum setting? (will ask about both acute care postpartum and clinic postpartum)
- How would you describe the best health care provider during the postpartum experience?

V. Innovate and improvise

- From your perspective what three wishes would you have to make the birth experience the best?
- From your perspective what three wishes would you have to make the birth experience the best?

Demographic Script and Questions:

At the end of the semi-structured interview participants will be asked about demographic information.

Interviewer script in italics.
For the purpose of this study, we are asking a few personal questions. Please answer only as you feel comfortable Any personal identifiers will not be shared with anyone but myself to protect your privacy. The findings may report data like the average age of all the study participants but will not report your age.

- What is your age in years? _____
- Which gender do you identify with most? _____

We are asking about ethnicity. This will not be shared in any of the research findings with the public to prevent stigmatization.

- How do you identify your ethnicity? _____
    - Do you identify as First Nation? Metis? Inuit? (If yes, identify which one.)
      _____
      _____
      As indicated in the research informed consent findings from this research will be shared with an Advisory Circle. Your personal interview will not be shared directly but we want to consult an expert Advisory Circle to ensure data is reported in a culturally appropriate manner and acknowledges the historical and current social contexts.
      I would also like to remind you and provide contact information for our Elder/Knowledge Keeper that is on call to debrief and consult following the interview.

- How long have you lived in Winnipeg? _____
- When did you first access the Women's Ambulatory Care Clinic – Green Leaf wing? _____
- How many living children do you have? _____
- How many pregnancies have you had? _____
- Are you currently in a romantic relationship with a partner or partners? _____

Appendix I – Women's Ambulatory Care Clinic Screening Tool

Patient's name:

Birthdate:

Address/phone #:

Patient's HSC #:

E.D.C.:

Location of delivery:

- ☐ No prenatal care or at risk for inadequate /poor prenatal care (late access, not attending)
- ☐ Alcohol and substance use during pregnancy
- ☐ Evidence/suspicion of intimate partner violence or abuse
- ☐ Lack of stable housing/homelessness
- ☐ History of no/poor prenatal care in previous pregnancy
- ☐ Evidence of active mental illness that has the potential to interfere with PNC attendance
- ☐ Minimal Social Supports
- ☐ Little to no income
- ☐ Active involvement with CFS requesting support
- ☐ Travel to give birth

Other information:

***Note the PI will not access this form. Care providers will invite patients to participate in the study if the check box alcohol and substance use during pregnancy is checked off.**

Appendix J – Invitation to Participate in the Study

Invitation to participate: Patient Verbal Invitation to be a Study Participant

You are invited to participate in an interview related to your care at the clinic. We are inviting patients who have reported substance use during their pregnancy to participate in the interview. We are aware that you have unique experiences when interacting with the health care system. We would like to hear your point of view on your hopes and dreams for the care system. Kristen, the lead researcher is an experienced trusted nurse and student at the University of Manitoba and will be the person interviewing you. The purpose of the interview is to gain your ideas on how to better your experiences with the care providers and develop strategies towards improvement. You are an expert in your experience and we will pay you for your time. If you choose to attend the interview, you will be given a $50 cash gift card.

The interview is completely confidential and your participation is voluntary. If you agree to participate you only need to discuss what you are comfortable with. Your participation is voluntary and involves attending one interview that will be no more than 60 minutes each in length. We will have a light refreshment and snacks provided at the interview.

Thank you for considering participating in this important research.

Kind regards,

Kristen Gulbransen RN PhD (c)

Appendix K – Consent to Contact

What is this research about? This research is about hearing from patients and gaining their point of view. We are interested in your point of view as a patient interacting with the health care system during your pregnancy, birth, and postpartum period. One interview will be scheduled with Kristen Gulbransen during the prenatal period and one interview following your postpartum appointment at the clinic. Kristen is one of our trusted researchers who is not a care provider at the clinic but has worked in this area for years. The interview will be done when you visit the clinic following your routine appointment in a private room, on an agreed upon time and platform that the patient requests (in person or on Zoom). All information shared will be confidential and you will not be identified in any way. We will provide compensation for parking, provide a lunch, and $50 cash card.

Where do I sign up? If you agree to be contacted to learn more about this research project, please fill in the information below and give this form to the administrative assistant of the clinic. The administrative assistant will provide the information to Kristen to set up your interview.

Participants Name: _____
Participant Contact Information:
Phone Number: _____
Alternate Phone Number: _____
Email: _____
City/town of residence: _____

Person obtaining consent: _____

Signature: _____

Appendix L – Letter of Support from Ambulatory Care Clinic Providers

Pathways to Care: Interventions to advance innovative maternity care delivery

June 1, 2022

Heather Watson, MD
Kellie Thiessen, RM, RN, PhD
[redacted]

Dear Review Committee,

We are delighted to confirm our agreement to partner with the researchers on the proposal entitled "A novel care model: Maternity care experiences of pregnant persons who use substances"

Current research led by Dr. Thiessen, from a CIHR Project grant, focused on stakeholder priorities as a priority. Kristen's research aligns with improving care for pregnant persons who use substances and illuminating the experiences that both providers and patients have during their pregnancies and birth. This research is important to the population that our interprofessional model of care serves and we are excited that an appreciative inquiry strengths-based approach is being taken. We strive to provide the highest quality of care in the Women's Ambulatory Care Clinic Green Leaf wing at the Women's Hospital in Winnipeg, Mb. This research is part of a larger project in the clinic and will add to the knowledge needed to further improve access to prenatal and birth services.

In support of this proposed study, our role at Women's Ambulatory Care Clinic Green Leaf wing will include:

- Assisting in recruiting participants (consent to contact form for providers and patients).
- Advising on the development of knowledge translation and dissemination products.
- A site for focus groups and interviews to take place on site.
- Supporting knowledge translation strategies within Care Circle Pathway Clinic.

We look forward to continued involvement with this study and the research team.

Sincerely,

Kellie Thiessen, PhD & Heather Watson, MD

[redacted] [redacted]

Appendix M – Briefing Note for Graphic Recorder

Color Palette: Vibrant Earth Tones – blue, green, yellow, red (for women), purple, orange, brown (earth)

Background shaded not white.

Title:

kā-wīci-pimohtēmāt (a person who walks with others in their journey) – put this under the title? Or on the poster?

Care Providers Connect with Pregnant Persons and Women Who Use Substances

Branding: University of Manitoba, CIHR, CHRIM

Background information: Study is about a novel care model for pregnant individuals who use substances. 14 pregnant or postpartum persons were interviewed and shared their stories about care experiences at Green Leaf clinic. Participant representation from Metis, First Nation, and Caucasian. The method used was appreciative inquiry which is strength based.

Ideas and words from Grandmother Shingoose (Knowledge Carrier):

- Pregnant individuals are water carriers.
- mother earth, stars,
- hand holding or human connection.
- placenta as the tree of life and umbilical cord showing the connections.
- the mothers' natural support systems being honored.
- home is where the mother and baby are together.
- Honoring the mother – her commitment to her child (mother-baby togetherness and natural bond).
- "Heartbeat ' Life, Nurture , Song .

Vision to have more images than words, have mother at center of graphic design. The central graphic on the poster able to be copied for Green Leaf clinic logo. Showing how strong and relational the mother and care providers are when they work with each other's strengths and trust each other.

Briefing Note:

Knowledge Carrier Perspectives:

- Important for providers to Honor the Pregnant Person who is a sacred water and baby carrier.
- The baby chooses the mother and on arrival they have a natural connection.
- The umbilical cord is put out during ceremony – what happens during ceremony influences what is going to happen to you later in life (ants gathering around the umbilical cord related to hard working and team worker or bird related to singing).
- Moms are ancestral carriers.
- Care at the clinic is noticeably for all – no matter if they are intoxicated or not. No judgment clinic.

Provider/Clinic Goals:

- demedicalize, provide social stabilization and promote parental growth/ownership/co-leadership in a supported setting. Providers want to learn from their patients. Desire to amplify the voices of patients.
- Provider quotes: "This is work that is worth getting out of bed for.;" "Our work focuses on providing care that is actionable;" "We model interprofessional approaches and continuity." Mindset at work is one of "integrity…looking past the barriers, which I feel like we encounter daily." "the system needs a constant nudge... we have to make noise."

Key Findings from interviews:

Care Provider Characteristics important to Pregnant Persons who Use Substances are:

1. Safe Care:
    a. Not judging
    b. Reassuring & Peaceful Relationship
    c. Harm Reduction

    Participant quotes: "No judgment. I can tell them anything.;" "The care at the clinic actually saved my life."

2. Compassionate Care:
    a. Kindness
    b. Listener

    Participant quotes: "They listened and cared. They really cared about me as a person."; "I am friendly to them because they are friendly to me"; "She was really nice …. She was motherly."

3. Dignified Care:
    a. Acceptance and Deserving
    b. Shared Decision Making
    c. Honoring Natural Supports

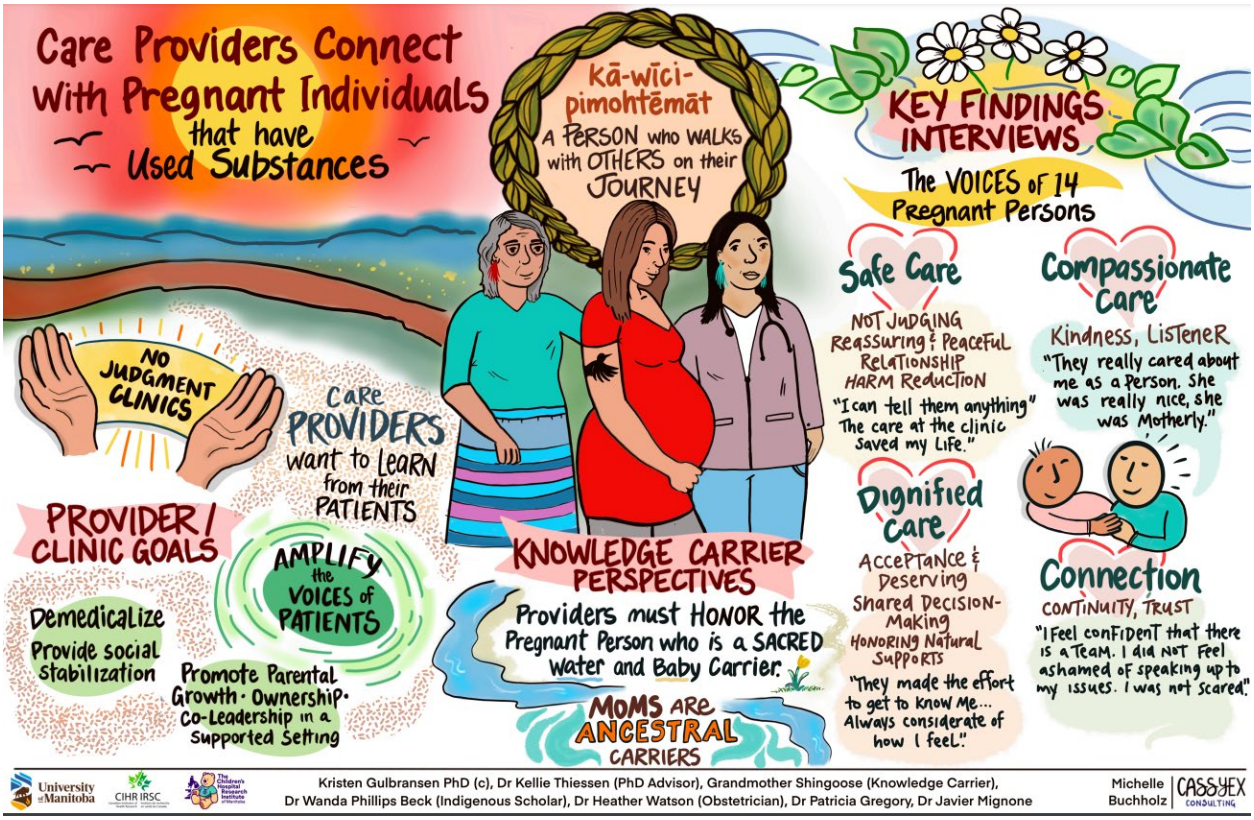
Participant quotes: “they made the effort to get to know me…. Always considerate of how I feel…”

4. Connection:
    a. Continuity
    b. Trust

    Participant quotes: “I feel confident that there is a team.”; “ I did not feel ashamed of speaking up to my issues…;” “I was not scared at the clinic.”

Appendix N

Graphic Recording of Research Findings



Appendix O: Interprofessional Perinatal Care (IPC) Clinic

Values, Development & Process

Values

Principles of Truth and Reconciliation: The first Call to Action of the TRC is to honour and preserve the family unit and community ties of Indigenous persons. This Call identifies a history of cultural bias and inequity that has been inherent in the work of Canada's Child Protection Service agencies, and challenges Canadians to seek healing within and between communities. Patients with psychosocial comorbidities during pregnancy have had a disproportionate and sometimes unindicated involvement with Child and Family Services (CFS), exacerbating these racialized inequities. Interprofessional Perinatal Care (IPC) providers should be aware of the risk of infant apprehension that is linked to substance use disorders, and the deep sense of anxiety persons feel about losing their child. This is an important opportunity for advocacy.

Patient-centred care: "Patient-centered care puts patients at the forefront of their health and care, ensures they retain control over their own choices, helps them make informed decisions and supports a partnership between individuals, families, and health care services providers."[1] This is actionable through dignity-preservation, information sharing, participation and collaboration between the patient and their providers. In maternity care, there is still outdated language such as physicians "letting" patients labour, deliver vaginally, and even continue with Opioid Agonist Therapy (OAT). Intake visits invite patients to identify their goals of care, and then the IPC team works to align with them safely and cultivate a care plan.

Trauma-informed care: Traumatic life experiences are those which fundamentally have an element of terror, isolation, and helplessness.[2] The features of the event itself are not an important defining factor, but rather how they are experienced and processed by the survivor. "[Trauma] is not a thing that you have. This is a process that expresses your life experience."[3] Subsequent experiences which literally or symbolically recapitulate the traumatic exposure, can trigger post-traumatic symptoms, and create powerful barriers to care. Many of the events of childbearing are high risk for unintended retraumatization - intimate exams, overwhelming physical symptoms with limited ability to suppress them, pain which can mimic withdrawal - which can destabilize a use disorder in remission or decompensate mental health. Seeking opportunities to maximize safety, relationship and agency are meaningful antidotes to the features of trauma.

---

[1] https://www.health.gov.bc.ca/library/publications/year/2015_a/pt-centred-care-framework.pdf

[2] Staff, A., Volunteers, K. O. P., & KOB, B. (2016). Klinic Community Health's Statement on Trauma-Informed Practice. https://trauma-informed.ca/wp-content/uploads/2013/10/Trauma-informed_Toolkit.pdf

[3] Maté, G. (2008). In the realm of hungry ghosts: Close encounters with addiction. Random House Digital, Inc..

Inter-professionalism: Substance-involved pregnancy represents a clinical situation which arises from a multifaceted pathogenesis. Childhood adversity, social inequity, genetic endowment, and familial coping all contribute to addiction. Pregnancy is a collision of changing physiology, social roles, and personal identity. Both have vulnerability to complex infections, mental health instability and intimate partner violence; together the comorbidities can be significant. A single patient may require support from Addictions Medicine, Cardiology, Obstetrics, Social Work, Endocrinology, Psychiatry, Public Health, and Neonatology all before the baby is even born. Medical silos result in care-redundancies, lack of continuity and missed treatment opportunities, all of which exacerbate negative outcomes. Timely, reciprocal communication between providers, including case conferencing with patients leading the discussion can help optimize care-efficiencies and improve outcomes.

Harm reduction: The recovery journey is a spectrum of goals and experience which range from frequent, high-dose, unregulated use to absolute abstinence with a wide variety of use- and care-engagement along the way. For some patients, their definition of recovery may not include abstinence; for others, anything short is considered failure. Meeting patients where they are at on their path to the recovery they value is a requisite first step in harm reduction. Identifying risk factors for overdose, complex infection, violent exposures, criminal engagement, and/or housing and food insecurity can illuminate opportunities to intervene to minimize these harms. In the setting of pregnancy harm reduction also considers the developmental impact of substance/toxic stress exposure to the fetus, the perfusion effects of use or withdrawal upon the placenta, congenital infection and the interplay between substance use and preeclampsia or gestational diabetes. OAT providers can collaborate with maternity care professionals to optimize harm reduction together as aligns with patient care goals.

DEVELOPMENT PROCESS

Appreciative Inquiry (AI): When determining roles for the interprofessional clinic, each of the lead providers (Drs Thiessen, Watson, and Ashdown) explored their shared professional goals through an AI process:

1. **Discover** - This is a personal strengths inventory. The intent was that each provider act out of their strengths. Appreciating the difficulty of this work, working out of weaknesses creates significant risk for burn-out.
2. **Dream** - Each party identified goals that were meaningful, not only for themselves personally, and the clinic long-term, but for their discipline. This included care strategies, research plans, and teaching/mentoring.
3. **Design** - This process synthesised a concrete plan and put it into writing. A formal proposal went back and forth between all three authors to solidify the rationale for this work (climbing maternal mortality rates in this population, escalating need in the community, enduring effects of colonization that add to suffering). Roles were made explicit, and long-term goals (group antenatal care, perinatal DBT) were envisioned.

4. **Deliver** - The clinic started out as a single half-day afternoon, carrying about 15 patients. Each week was an opportunity to refine how clinic ran, care was shared, roles were defined, and goals were modified. The clinic has since grown to support 50 patients across two half-day afternoons and one mobile clinic day.

CLINIC PROCESS

1. **Shared care:** Patients are seen by either Dr. Thiessen or Dr. Watson on a first-come-first-serve basis as they arrive to clinic with the exception of the most medically complicated (see Dr. Watson) or most aligned with midwifery (see Dr. Thiessen). New intakes are booked for 30 minutes, including the patient's 3 top priority goals for care. These are briefly discussed, and both maternity care providers will meet the individual. Dr. Ashdown may be simply introduced or consulted for a formal assessment ad hoc; psychiatric care is not indicated for every patient. For follow-ups, those with symptomatic or complex mental illness will be seen regularly by Dr. Ashdown, or by request should a new issue arise. For patients in crisis, all three providers will strategize real-time about additional consultation and care approach. **Clinic based care is collaborative, flexible, and responsive to patient needs. Decision-making is lateral, and free from hierarchical burdens.**
    - A referral response letter is sent to the consulting provider to reinforce these care goals and recruit the primary care clinician to co-follow closely in the postpartum interval and across the first postpartum year.

2. **Case conferencing:** Weekly virtual meetings are conducted to preview the upcoming clinic roster and plan care. This helps to identify areas of concern, for consultation or medication changes. A patient list is prepared including the medical, psychological, substance and social needs along with the routine maternity care due as per gestational age. **Case conferencing allows reflection, recruitment of resources such as social work and endocrinology, and plans for advocacy.**

3. **Mobile care:** Dr. Watson provides mobile antepartum care for folks who have barriers to access such as transportation and childcare needs, or anxiety about the healthcare environment. Locations are diverse including homes, shelters, encampments, and alternate care centres. Blood pressure, fetal heart tones, fundal height and mental health can be assessed, but bedside ultrasonography and phlebotomy are not possible at this time. Dr. Thiessen provides mobile postpartum care, assessing infant wellbeing and weight, breastfeeding, maternal blood pressures and mental health. For particularly complex patients, both maternity care providers will see patients in tandem throughout

the perinatal course in shelter spaces and/or hospital wards. Dr. Ashdown provides virtual care outside of clinic hours well into the postpartum course for those at highest risk for psychiatric decompensation. **Mobile care is a key element to harm reduction, care inclusion and allows the team to be adaptive to patient needs. It notably increases attendance later to clinic.**

4. **Consultation:** The Ambulatory Care Clinic at large has access to social work, psychology, a dietician, and nurse practitioners who provide counselling. These providers can be consulted and, in the case of social work, can respond in the moment to acute concerns. The social worker on service for the day will review the patient list with the IPC maternity provider and identify opportunities to provide support and resources. Fetal Assessment is adjacent, and a mutual referral pathway is shared - patients who arrive without a prenatal care provider are invited to the IPC clinic, and for those who struggle to attend scheduled appointments, impromptu scans can be requested when urgently required. Other services such as cardiology, genetics, endocrinology etc. are consulted formally but appointments are sometimes adapted to include the consultant virtually into a clinic visit with the IPC team. **Consultation is collaborative, rather than just exchanging refer-response letters, and allows care to be responsive to unfolding needs and urgent concerns. Provider to provider communication is real-time and reciprocal.**

5. **Opioid Agonist Therapy (OAT):** Both Drs Watson and Ashdown are OAT providers, to support established treatment in the out-patient environment and help educate patients about opioid-involved pregnancy. Dr. Watson can admit patients to the ward for suboxone, methadone and/or kadian inductions, usually in collaboration with Addictions Medicine and sometime with transfer of care to their ward. Dr. Ashdown can recruit patients to a Co-Occuring Disorders Initiative (CODI) for group and individual therapy for mental illness complicated by disordered substance use. **Co-location of maternity care and OAT provision reduces barriers to addictions care and validates OAT as gold standard care in opioid-involved pregnancy.**

6. **Dialectical Behavior Therapy (DBT):** Dr. Ashdown provides brief interventions and motivational interviewing in addition to the traditional psychiatric assessment. Visits can be time limited and may focus on a single coping skill or communication strategy. Some patients will request weekly visits during times of crisis. Groups therapy is a goal of the clinic team, to foster relationships in community. **Coaching with tangible, operational coping-skills affirms psychosocial needs beyond medication management. Pregnancy becomes an opportunity for growth and enhanced self-mastery.**

7. **Drop-ins:** While the clinic is formally scheduled, patients are aware that they are welcome to "just show up" when they need to. With housing and relationship instability, needs can change abruptly. Patients also have invitation to page Dr. Watson for emergencies 24/7. For non-emergency concerns, they tend to reach out to Dr. Thiessen. **Spontaneity allows for rapid change in the social context. A single drop-in visit can result in an anatomy scan, initiation of emergency medication coverage or application for housing, a small meal, identification of an acute medical process with treatment, and trust in care.**

8. **Birth:** Call coverage for birth was initially provided by Drs. Thiessen and Watson alone, signing out to colleagues to allow rest when required. Deliveries were deeply affirming of the therapeutic alliance and reassuring to patients anxious about being judged by unfamiliar providers. If birth was by caesarean, Dr. Thiessen could attend for emotional support.

   After the clinic population tripled this was no longer possible, and the difficult decision was made to modify on-call oversight. Call-group coverage has been engaged with local obstetricians familiar with this population until recruitment can grow the core team of maternity providers. For particularly high-risk patients, an IPC provider will attend regardless of the call schedule. **Care continuity from clinic to delivery preserves patient dignity and the integrity of the therapeutic alliance. Demands of volume compete with this need for continuity.**

FIG 1: IPC Team logo:

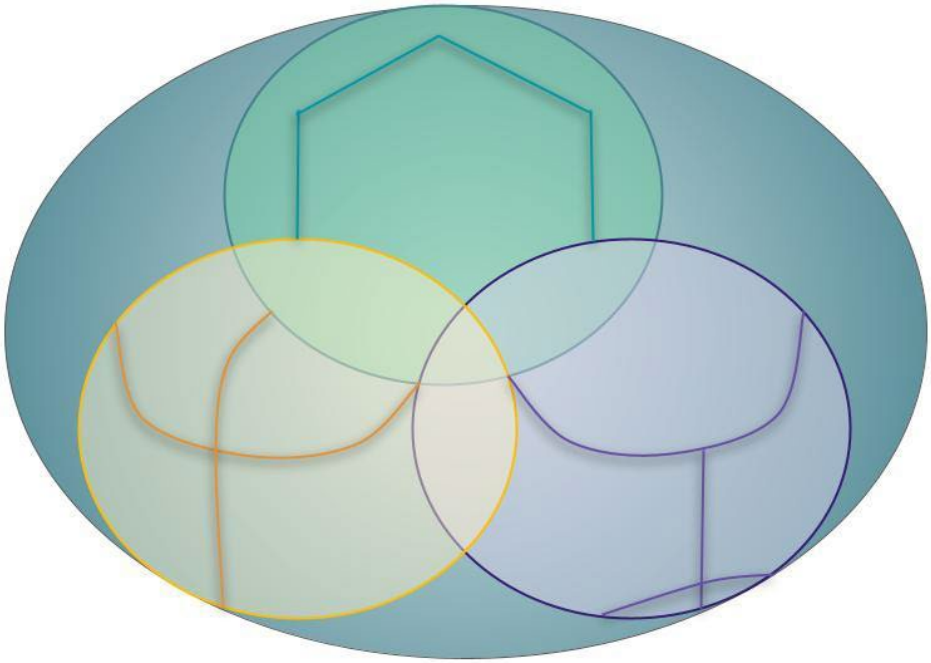
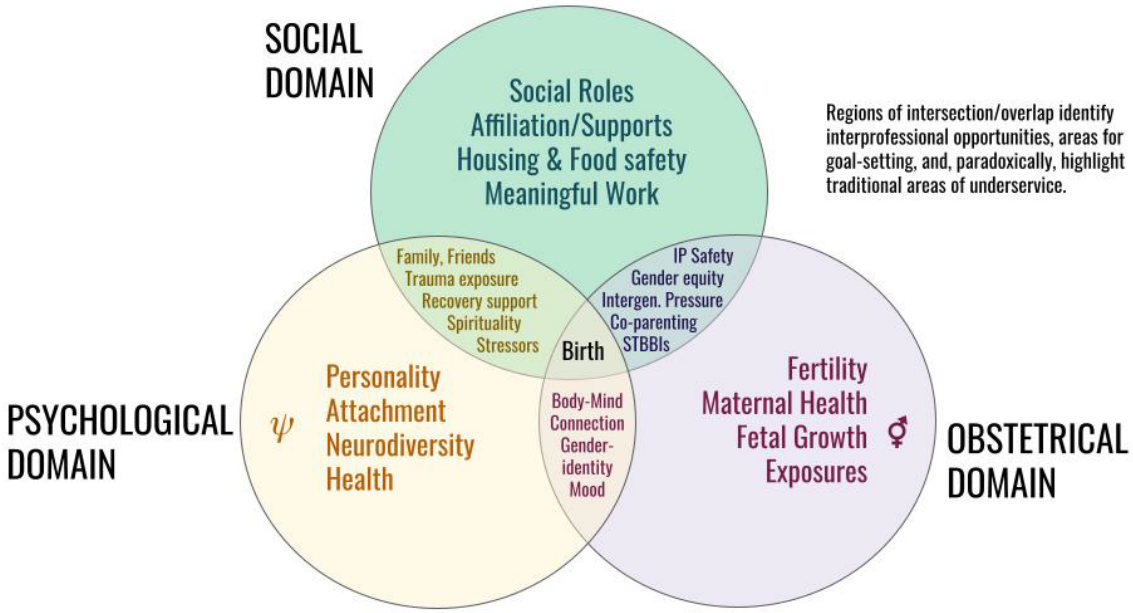


FIG 2: Explanation of the logo as an illustration of a psychosocial obstetrics model of care



Abbreviations: IP: Intimate partner, STBBIs: Sexually transmitted blood borne infections

Developed by: Dr. Heather Watson, MD FRCSC (PDWH), Dr. Kellie Thiessen, RM PhD, Dr. Heather Ashdown MD FRCPC

June 25, 2023